

# Catalogue 2024

HOME



As of July 1, 2024





# **Perfectly connected**

- PEWETA® DCFport24 telegram
- PEWETA® AirPort24 RC telegram
- NTP technology



# **Table of Contents**

Here you will find what you are looking for.



Table of **Contents** 

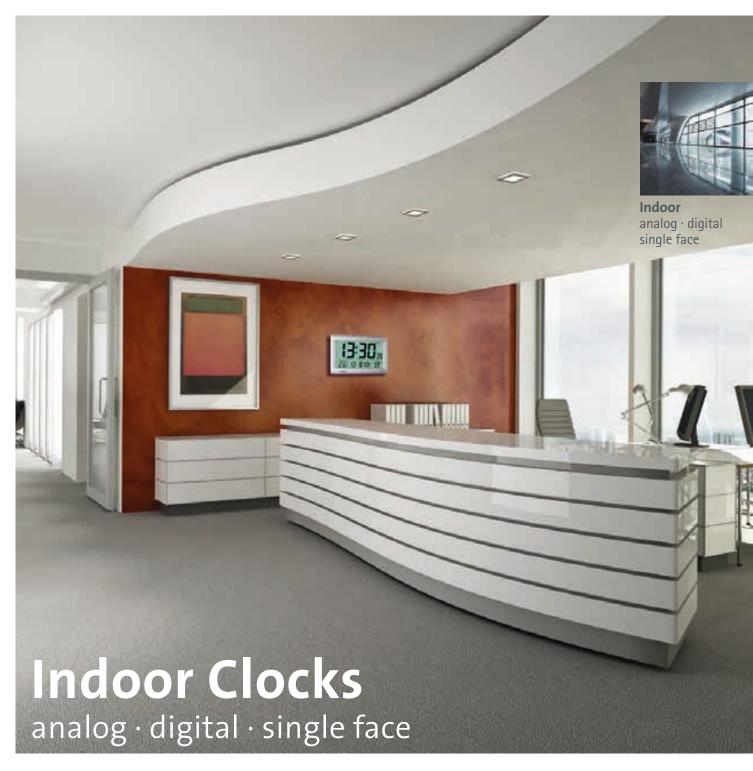
Quartz and radio controlled clocks		Digital clocks for indoors	
for indoors, up to 400 mm diameter		Type series 510 to 570	111-1
Type series 106 to 190	3–10	LED digital clocks	112-1
☐ LCD digital clocks	4	Little display	112-1
analog wall clocks	4–10	inic and date display	116–1
with data display	8	☐ World Time Clocks	128–1
with date display	9	$\square$ modules for mounting in 19" racks	130–1
Analog clocks for indoors, up to 400 mi Type series 230 to 282	11–59	☐ for control panel mounting	1
Wall clocks, "representative" type	12-17	remote control unit for stopwatch mode	1
with silver anodised face	12-17	LCD digital clocks	134–1
with Roman numerals	16	$\square$ time display	134–1
☐ with extra large numerals	17	☐ time and date display	1
■ Wall clocks, "standard" type	18–59	$\square$ analog clock with LCD date display	137–1
☐ round, single face	18-35	LED digital displays for indoors	
□ round, double face	36-41	Type series 610 to 676	139–14
☐ square, single face	42-53	$\square$ time and date display with stopwatch mode	140-1
square, double face	54-59	$\square$ LED game result displays/scoreboard	142-1
Analog clocks for indoors, 400600 mr		Analog clocks for outdoors, 400900 mm	
Type series 330 to 395	60–87	Type series 730 to 790	149-1
round, single face	61, 64–67	. 3	150-1
☐ 🖻 resistant to thrown balls (acc. to DIN)		,	150-1
	62-63, 68-71	round, with LED backlighting	154–1
square, single face, in-wall mounting	72-75	square, with LED backlighting	158–1
<ul><li>□ square, single face, on-wall mounting</li><li>□ \oldsymbol{\textit{D}}\sigma^* resistant to thrown balls (acc. to DIN)</li></ul>	76–79 72–79	training clock/pace clock,	100 1
square, double face	80–83	with LED backlighting  ☐ clock cubes with four faces,	162–1
☐ clock cubes with four faces	84–87		164–1
Special clocks		LED digital displays for outdoors	
Type series 420 to 431	88–95	Type series 810 to 830	166-16
Wall clocks, waterproof/dust proof (I	P 64) 89	☐ alternating time and temperature display	166–1
Wall clocks f. relaxation rooms and sa	unas 90–91	☐ soccer score display boards	168-1
Training clocks/pace clocks	92–95	Control units	
Clocks for clean rooms		Type series 921 to 980	170-18
and surgical operating theatres	06.440	Master clocks	172-1
Type series 460 to 498	96–110	$\square$ for wall mounting	172-1
round, analog	96-99	$\square$ for mounting in 19" racks	174–1
square, analog	100-103	DCF77 and GPS receiving aerial	173, 1
<ul><li>□ square, analog and digital</li><li>□ digital, single and double face</li></ul>	104–107 108–109	Booster amplifier	1
☐ remote control unit for stopwatch mode	110	· · · · · · · · · · · · · · · · · · ·	1
· ·		DCF77-controlled mini master clock	1
	from page(s)	NTP Time Server	1
☐ Standard indoor clocks, single face	18		
☐ Clocks for mounting to media pillars	24	■ 19" Time Server System	180–1
☐ Indoor clocks resistant to thrown balls	64 92 and 162	Technical information,	
☐ Training clocks/pace clocks☐ Clocks for surgical operating theatres	92 and 162 96	"Good to know the details"	
☐ Digital clocks	112	☐ Wiring diagram	
☐ Game result displays/scoreboards	142	for PEWETA type series 921 Master Clocks	1
☐ Outdoor clocks	150	□ DCF77 propagation range	1
☐ Master clocks/Signalling master clocks	172	<ul> <li>General Terms and Conditions of Sale, prices, freight and handling</li> </ul>	1
		prices, recigiff and handilly	

In the PDF version of this  $catalogue,\,the\,page\,numbers$ on this page and in all cross references throughout the catalogue are linked up to the pages that they point to.

Simply click on this symbol at the bottom of each page to return to the Table of

contents





Sensible, matter-of-fact clocks in an attractive, up-to-date design. In the office or the shop, the surgery or the lab, the reception area or the cafeteria, the conference room or the lounge – in all those places these clocks earn the term »outstandingly suitable«.



## **DCF77 Radio Controlled Wall Clock**



Indoor digital single face

**106** 

















DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.

Time, date, temperature everything at a single glance. And the price is right, too.

Attractive, metallic silver coloured plastic case. Protection grade IP 40 (EN 60529).

#### LCD digital display

Extra large numerals provide for optimum readability of hours, minutes, and seconds, as well as date, abbreviated day of week (8 languages), indoor temperature, and humidity. Manual time zone selection. 1.5 V battery operation.

DCF77 radio controlled clock with fully automatic adjustment of time and date at initial operation as well as fully automatic change-over of summer/winter time.



Technical data		
Case	colour	metallic silver
	material	plastic
	dimensions (WxHxD)	cir. 410 x 270 x 43 mm
Display	cipher height hour/minute	cir. 110 mm
	cipher height date, seconds, temperature	cir. 35 mm
	abbreviated day of week	cir. 35 mm
	reading distance (hour/minute) up to	cir. 20 m
Weight		cir. 1.1 kg
Batteries	Batteries not included	
Type		Item No. € each

	·	
Type	Item No.	€ each
DCE77 radio controlled clock, battery operated 1.5 V	51.106.093	159



Sensible, matter-of-fact wall clocks in an attractive design. And the price is right, too.

#### Case

cir. 250 mm diameter
 cir. 300 mm diameter
 plastic case, choice of white, black or matt silver.

Protection grade IP 40 (EN 60 529).

#### Front glass

Flat mineral glass.

#### Face

White face with black Arabic numerals or black DIN bar markings.

#### Hands

Black bar-type hour and minute hands, red second hand.



Туре	Case diameter	Markings	Colour	Item No.	€ each
Quartz clock, soundless,	250 mm	numerals	white	44. <b>130</b> .211	39
battery operated 1.5 V		numerals	black	44. <b>130</b> .212	39
		numerals	silver	44. <b>130</b> .213	39
DCF77 radio controlled clock,	250 mm	numerals	white	51. <b>130</b> .211	49
battery operated 1.5 V		numerals	black	51. <b>130</b> .212	49
		numerals	silver	51. <b>130</b> .213	49
Quartz clock, soundless,	300 mm	numerals	white	44. <b>130</b> .311	49
battery operated 1.5 V		numerals	black	44. <b>130</b> .312	49
		numerals	silver	44. <b>130</b> .313	49
		DIN bars	black	44. <b>130</b> .322	49
DCF77 radio controlled clock,	300 mm	numerals	white	51. <b>130</b> .311	59
battery operated 1.5 V		numerals	black	51. <b>130</b> .312	59
		numerals	silver	51. <b>130</b> .313	59
		DIN bars	black	51. <b>130</b> .322	59



Indoor analog single face

Type series 130



















DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.







Quartz type

creeping second handsoundless clockwork



## **DCF77 Radio Controlled Wall Clocks**

with creeping second hand, soundless



Indoor analog single face









DCF77 radio controlled

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.

Large, state-of-the-art DCF77 radio controlled wall clocks in an attractive design. Soundless clockwork. No ticking.

cir. 350 mm diameter plastic case, choice of white, black or matt silver. Protection grade IP 40 (EN 60529).

### Front glass

Flat mineral glass.

White face with black numerals or black DIN bar markings.

Black bar-type hour and minute hands, red second hand with creeping



Туре	Markings	Case colour	Item No.	€ each
DCF77 radio controlled clock,	numerals	white	55. <b>131</b> .311	75
soundless, battery operated 1.5 V	numerals	matt silver	55. <b>131</b> .313	75
	DIN bars	black	55. <b>131</b> .322	75

#### All types

- creeping second hand
- soundless clockwork







## with "Railway Station Clock" style second hand

Attractive wall clock in a classy aluminium case with a distinctive "Railway Station Clock" style second hand.

#### Case

cir. 300 mm diameter metal case, aluminium, matt brushed. Protection grade IP 40 (EN 60529).

## Front glass

Flat mineral glass.

Typical "Railway Station Clock" style face with black DIN bar markings.

#### Hands

Black bar-type hour and minute hands, typical "Railway Station Clock" style second hand with "eye".



Туре	Item No.	€ each
Quartz clock, soundless, battery operated 1.5 V	44. <b>150</b> .325	63
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>150</b> .325	79

#### Quartz type

creeping second hand soundless clockwork



Indoor analog single face



















#### DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.



## **DCF77 Radio Controlled Wall Clock**

with insert displays indicating temperature and humidity



**Indoor** analog single face

Type series 161











DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.

Sensible wall clock in an attractive design – indications of temperature and humidity included!

#### Case

cir. 300 mm diameter metal case, aluminium, matt brushed. Protection grade IP 40 (EN 60 529).

## Front glass Flat mineral glass.

#### Eaco

White face with black Arabic numerals, LCD display for weather trend, temperature, and humidity.

#### Hands

Black bar-type hour and minute hands, red second hand.



Туре	Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>161</b> .315	75





# **DCF77 Radio Controlled Wall Clocks**

## with LCD date display

Highly functional wall clocks in an attractive design - outstandingly suited for environments where date and time must be instantly readable free of doubt.

#### Case

cir. 300 mm diameter plastic case, choice of black or matt

Protection grade IP 40 (EN 60529).

#### Front glass

Domed clear plastic.

White with black Arabic numerals, very easy-to-read LCD display showing abbreviated day of week (in German only), month and day.

#### Hands

Black bar-type hour and minute hands, red second hand.



Туре	Colour	Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5 V	black	51. <b>170</b> .312	64
	silver	51. <b>170</b> .313	69



Indoor analog single face



















#### DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.





## **DCF77 Radio Controlled Wall Clocks**



Indoor analog single face













DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures.

Attractive, radio controlled wall clocks in an up-to-date design. One look tells you the time, accurate to the second.

#### Case

- cir. 200 mm diameter
- cir. 300 mm diameter
- cir. 400 mm diameter

metal case, aluminium, matt brushed. Protection grade IP 40 (EN 60 529).

## Front glass

Flat mineral glass.

White face with black Arabic numerals.

#### Hands

Black bar-type hour and minute hands, red second hand.



Туре	Case diameter		€ each
DCF77 radio controlled clock,	200 mm	51. <b>190</b> .205	59
battery operated 1.5 V	300 mm	51. <b>190</b> .305	79.–
	400 mm	51. <b>190</b> .405	105





Demanding environments require high quality clocks, instantly readable from any direction and clear enough to avoid error or doubt even at long distances.

That's all the time you need ...



## with **printed** bar markings



Indoor analog single face















clocks







DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Distinctive clocks with highcontrast faces - black bar markings on silver anodised aluminium faces.

#### Case

cir. 300 mm diameter metal case, enamelled black (RAL 9005), optionally stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) in a matted finish or metal case enamelled in colours (see list below).

Protection grade IP 40 (EN 60529).

#### Front glass

Domed mineral glass as standard, shock-resistant Plexiglas® XT as an option.

#### Packaging (Option)

As an option, clockwork packaged to protect it against blown dust and/ or sprayed water (IP 54 according to EN 60529) is available.

Metal face, enamelled silver anodised aluminium with a radial brush finish, high contrast black bar type markings.

Black bar-type hour and minute hands, black second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.





Clock type	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>230</b> .341	240
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>230</b> .341	295
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>230</b> .341	375
Slave clock, minute pulse 1260 V	71. <b>230</b> .341	255
Slave clock, minute/second pulse 12/24 V	72. <b>230</b> .341	480
Telegram slave clock, DCFport24	81. <b>230</b> .341	280
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>230</b> .341	384
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>230</b> .341	444.–
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>230</b> .341	429

		Surcharge
Options	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	none
Case enamelled in metallic dark gun metal DB 703	-06	none
Case custom enamelled	-10	on request
Case stainless steel V2A, matted finish	-20	89
Low reflectivity front glass	-50	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59
Packaging against dust and spray (IP 54)	-54	69
External DCF77 receiving aerial (cannot be added later)	-60	169

#### Options - just as you like them ... These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the

appropriate suffix(es) to the Item No.

Case colour	Suffix
jet black RAL 9005	-01
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10



<sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by



## with **elevated** bar markings

A wall clock of marked exclusivity – distinctive prominent bar markings lend an individual and unmistakable appearance to this clock. The domed front glass may be removed at the customer's discretion to bring the prominent face structure to even better view.

#### Case

cir. 300 mm diameter metal case, enamelled black (RAL 9005), optionally stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) in a matted finish or metal case enamelled in colours (see list below).

Protection grade IP 40 (EN 60529).

#### Front glass

Domed shock-resistant Plexiglas® XT, may be removed at customer's discretion (resulting protection grade IP 30).

#### Face

Metal, silver anodised with radial brush finish, prominent black bar-type markings, elevated.

#### Hands

Black bar-type hour and minute hands, black second hand.

No second hand on minute pulse 12... 60 V controlled slave clocks.

# 41.232.441 shown

Clock type	Item No.	€ each
Quartz clock, battery operated 1.5 V	41.232.441	404
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>232</b> .441	469
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>232</b> .441	549
Slave clock, minute pulse 1260 V	71. <b>232</b> .441	409
Slave clock, minute/second pulse 12/24 V	72. <b>232</b> .441	634
Telegram slave clock, DCFport24	81. <b>232</b> .441	444
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>232</b> .441	548
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>232</b> .441	608.–
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>232</b> .441	593

Options	Suffix	Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	none
Case enamelled in metallic dark gun metal DB 703	-06	none
Case custom enamelled	-10	on request
Case stainless steel V2A, matted finish	-20	109
Low reflectivity front glass	-50	on request
External DCF77 receiving aerial (cannot be added later)	-60	169

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.



These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Options - just as you like them ...

Case colour	Suffix
jet black RAL 9005	-01
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10



Indoor analog single face

Type series 232





















## DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a rematable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24 PEWETA AirPort24 slave clocks

PEWEIA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

<sup>&</sup>lt;sup>1)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by



Indoor

analog

single face

DCF77 radio controlled

DCF77 radio controlled clocks

1,500 km around Mainflingen

(50 km east of Frankfurt/M.)

and under conditions of free

radio propagation and may be impaired in heavily rein-

forced concrete structures.

PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from

For this case we recommend a remotable DCF77 aerial

will only function correctly within a radius of approx.

clocks

(option).

page 172 on).

(see page 177).

NTP

PEWETA AirPort24

PEWETA AirPort24 slave clocks

mitter or repeater respectively

NTP system clocks require a

PEWETA master clock (see from page 172 on) or an NTP

time server (see page 179).

require an AirPort24 trans-

# Wall Clocks single face

Sophisticated clocks for demanding environments – a professional means of showing the time.



finish.

cir. 300 mm diameter

cir. 400 mm diameter very sturdy metal case, as standard enamelled charcoal-metallic (dark gun metal, DB 703) or, as an option, enamelled in colours (see list below). As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted

Protection grade IP 40 (EN 60529).

#### **Snap-tight fixture (option)**

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off. No protection against thrown balls.

#### Front glass

Domed mineral glass on 300 mm cases, shock-resistant Plexiglas® XT on 400 mm cases. As an option, low reflectivity front glass is available.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/ or sprayed water (IP 54 according to EN 60529) is available.

#### Face

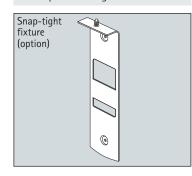
Silver anodised with radial brush finish, black Arabic numerals for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, black second hand. No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.





Clock type	300 mm Item No.	€ each	400 mm Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>240</b> .311	220	41. <b>240</b> .411	314
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>240</b> .311	275	51. <b>240</b> .411	379
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>240</b> .311	355	52. <b>240</b> .411	459.–
Slave clock, minute pulse 1260 V	71. <b>240</b> .311	235	71. <b>240</b> .411	319
Slave clock, minute/second pulse 12/24 V	72. <b>240</b> .311	460	72. <b>240</b> .411	544
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>240</b> .311	600	73. <b>240</b> .411	684.–
Telegram slave clock, DCFport24	81. <b>240</b> .311	260	81. <b>240</b> .411	354
RC telegram slave clock, <i>AirPort24</i> , battery operated 1.5 V	84. <b>240</b> .311	364	84. <b>240</b> .411	458.–
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>240</b> .311	424	85. <b>240</b> .411	518.–
NTP system clock (NTP client), synch. by LAN, PoE 1)	91. <b>240</b> .311	409	91. <b>240</b> .411	503

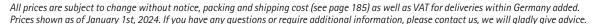
Options	Suffix	Surcharge € each		Surcharge € each
Case enamelled in jet black RAL 9005	-01	none	-01	none
Case enamelled in metallic silver grey RAL 9006	-05	none	-05	none
Case custom enamelled	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	89	-20	109
Low reflectivity front glass	-50	on request	-50	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59	fitted	as standard
Packaging against dust and spray (IP 54)	-54	69	-54	69
Snap-tight mounting fixture	-57	49	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169

<sup>1)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

This Snap-tight fixture (option -57) prevents the clock from dropping or being wrenched off. Screw fixture to the wall, attach clock – done! No protection against thrown balls.

Case colour	Suffix
jet black RAL 9005	-01
metallic silver grey RAL 9006	-05
custom enamelled	-10
stainless steel V2A	-20







## single face

Sophisticated clocks for demanding environments – a professional means of showing the time.

#### Case

cir. 300 mm diameter

cir. 400 mm diameter

very sturdy metal case, as standard enamelled charcoal-metallic (dark gun metal, DB 703) or, as an option, enamelled in colours (see list below). As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

## **Snap-tight fixture (option)**

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off. No protection against thrown balls.

#### Front glass

Domed mineral glass on 300 mm cases, shock-resistant Plexiglas® XT on 400 mm cases. As an option, low reflectivity front glass is available.

## Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/ or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

Silver anodised with radial brush finish, black fine-line markings. Face printed according to DIN 41091.

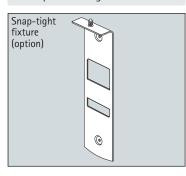
#### Hands

Black bar-type hour and minute hands, black second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.





	300 mm		400 mm	
Clock type	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>240</b> .331	220	41. <b>240</b> .431	314
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>240</b> .331	275	51. <b>240</b> .431	379
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>240</b> .331	355	52. <b>240</b> .431	459.–
Slave clock, minute pulse 1260 V	71. <b>240</b> .331	235	71. <b>240</b> .431	319
Slave clock, minute/second pulse 12/24 V	72. <b>240</b> .331	460	72. <b>240</b> .431	544
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>240</b> .331	600	73. <b>240</b> .431	684.–
Telegram slave clock, DCFport24	81. <b>240</b> .331	260	81. <b>240</b> .431	354
RC telegram slave clock, <i>AirPort24</i> , battery operated 1.5 V	84. <b>240</b> .331	364	84. <b>240</b> .431	458.–
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>240</b> .331	424	85. <b>240</b> .431	518
NTP system clock (NTP client), synch, by LAN, PoE 1)	91.240.331	409	91. <b>240</b> .431	503

Options	300 mm Suffix	Surcharge € each		Surcharge € each
Case enamelled in jet black RAL 9005	-01	none	-01	none
Case enamelled in metallic silver grey RAL 9006	-05	none	-05	none
Case custom enamelled	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	89	-20	109
Low reflectivity front glass	-50	on request	-50	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59	fitted	as standard
Packaging against dust and spray (IP 54)	-54	69	-54	69
Snap-tight mounting fixture	-57	49	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169

<sup>1)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

	This Snap-tight fixture (option -57) prevents
◂	the clock from dropping or being wrenched
	off. Screw fixture to the wall, attach clock -
	done! No protection against thrown balls.

Case colour	Suffix
jet black RAL 9005	-01
metallic silver grey RAL 9006	-05
? custom enamelled	-10
stainless steel V2A	-20



Indoor analog single face

Type series 240























clocks
DCF77 radio controlled clocks
will only function correctly
within a radius of approx.
1,500 km around Mainflingen
(50 km east of Frankfurt/M.)
and under conditions of free
radio propagation and may
be impaired in heavily reinforced concrete structures.
For this case we recommend
a remotable DCF77 aerial
(option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).



**15** 





Indoor analog single face























DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PFWFTA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Elegant clocks, combining faces with Roman numerals and tapered hands with state-of-theart clockwork technology.

#### Case

cir. 300 mm diameter very sturdy metal case, as standard enamelled white (RAL 9016) or, as an option, enamelled in colours (see list below).

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

#### Snap-tight fixture (option)

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off.

#### Front glass

Domed mineral glass as standard, shock-resistant Plexiglas® XT as an option.

#### **Face**

Metal, enamelled white with black Roman numerals.

Tapered black hour and minute hands, no second hand.

#### Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!





Clock type	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>246</b> .311	210
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>246</b> .311	265
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>246</b> .311	345
Slave clock, minute pulse 1260 V	71. <b>246</b> .311	225
Telegram slave clock, DCFport24	81. <b>246</b> .311	250
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>246</b> .311	354
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>246</b> .311	414
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>246</b> .311	399

Options	Suffix	Surcharge € each
Case enamelled in jet black RAL 9005	-01	none
Case enamelled in metallic silver grey RAL 9006	-05	none
Case enamelled in metallic dark gun metal DB 703	-06	none
Case custom enamelled	-10	on request
Case stainless steel V2A, matted finish	-20	89
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59
Snap-tight mounting fixture	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169

<sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

Case colour	Suffix
jet black RAL 9005	-01
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20



Highly presentable clocks for demanding environments – a professional means of showing the time.

#### Case

cir. 300 mm diameter very sturdy metal case, as standard enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in colours (see list below).

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

#### **Snap-tight fixture (option)**

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off.

#### Front glass

Domed mineral glass as standard, shock-resistant Plexiglas® XT as an ontion.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/ or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

Metal, enamelled white with extra large, distinct black Arabic numerals for easy, doubt-free reading even over longer distances.

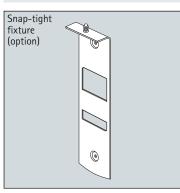
#### Hands:

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.





Clock type	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>249</b> .311	190
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>249</b> .311	245
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>249</b> .311	325
Slave clock, minute pulse 1260 V	71. <b>249</b> .311	205
Slave clock, minute/second pulse 12/24 V	72. <b>249</b> .311	430
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>249</b> .311	570
Telegram slave clock, DCFport24	81. <b>249</b> .311	230
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>249</b> .311	334
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>249</b> .311	394
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>249</b> .311	379

Options	Suffix	Surcharge € each
Case enamelled in jet black RAL 9005	-01	none
Case enamelled in metallic silver grey RAL 9006	-05	none
Case enamelled in metallic dark gun metal DB 703	-06	none
Case custom enamelled	-10	on request
Case stainless steel V2A, matted finish	-20	89
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59
Packaging against dust and spray (IP 54)	-54	69
Snap-tight mounting fixture	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169

<sup>1)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

Suffix
-01
-05
-06
-10
-20



Indoor analog single face

Type series 249

















## DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24 PEWETA AirPort24 slave clocks

PEWEIA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).







single face



Indoor analog single face





















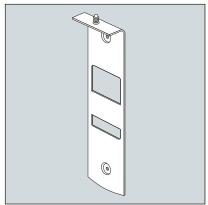








Highly presentable clocks for demanding environments – a professional means of showing the time.



This Snap-tight fixture (option -57) prevents the clock from dropping or being wrenched off. Screw fixture to the wall, attach clock – done! No protection against thrown balls.



cir. 300 mm diameter

cir. 400 mm diameter

very sturdy metal case, as standard enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in colours (see list below).

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

## **Snap-tight fixture (option)**

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off. No protection against thrown balls.

#### Front glass

Domed mineral glass on 300 mm case, shock-resistant Plexiglas® XT on 400 mm case as standard. As an option, low reflectivity front glass is available.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### **Face**

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 V AC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



**Indoor** analog single face

# Type series 250





















## DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24 PEWETA AirPort24 slave clocks

PEWEIA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

face diameter ▶	300 mm		400 mm	
Clock type	Item No.	<b>€</b> each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>250</b> .311	190	41. <b>250</b> .411	284
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>250</b> .311	245	51. <b>250</b> .411	349
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>250</b> .311	325	52. <b>250</b> .411	429
Slave clock, minute pulse 1260 V	71. <b>250</b> .311	205	71. <b>250</b> .411	289
Slave clock, minute/second pulse 12/24 V	72. <b>250</b> .311	430	72. <b>250</b> .411	514
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>250</b> .311	570	73. <b>250</b> .411	654
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>250</b> .311	615	74. <b>250</b> .411	699
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>250</b> .311	590	75. <b>250</b> .411	674
Telegram slave clock, DCFport24	81. <b>250</b> .311	230	81. <b>250</b> .411	324
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>250</b> .311	334	84. <b>250</b> .411	428
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>250</b> .311	394	85. <b>250</b> .411	488
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>250</b> .311	379	91. <b>250</b> .411	473
RC telegram slave clock, <i>AirPort24</i> , battery operated 1.5 V RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	84. <b>250</b> .311 85. <b>250</b> .311	334 394	84. <b>250</b> .411 85. <b>250</b> .411	428.– 488.–

	300 mm	Surcharge		
Options	Suffix	€ each	Suffix	k € each
Case enamelled in traffic white RAL 9016	-00	none	-00	none
Case enamelled in jet black RAL 9005	-01	none	-01	none
Case enamelled in metallic dark gun metal DB 703	-06	none	-06	none
Case custom enamelled	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	89	-20	109
Low reflectivity front glass	-50	on request	-50	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59	1	fitted as standard
Packaging against dust and spray (IP 54)	-54	69	-54	69
Snap-tight mounting fixture	-57	49	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
traffic white RAL 9016	-00
jet black RAL 9005	-01
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



**Indoor** analog single face

Type series 250















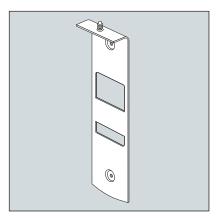








Highly presentable clocks for demanding environments – a professional means of showing the time.



71.**250**.321 shown

This Snap-tight fixture (option -57) prevents the clock from dropping or being wrenched off. Screw fixture to the wall, attach clock – done! No protection against thrown balls.



cir. 300 mm diameter

cir. 400 mm diameter

very sturdy metal case, as standard enamelled metallic silver grev (RAL 9006) or, as an option, enamelled in colours (see list below).

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

## **Snap-tight fixture (option)**

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off. No protection against thrown balls.

#### Front glass

Domed mineral glass on 300 mm case, shock-resistant Plexiglas® XT on 400 mm case as standard. As an option, low reflectivity front glass is available.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### **Face**

High distinction white metal with black DIN bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Pointed black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



Indoor analog single face





















clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24 PFWFTA AirPort24 slave clocks

require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

face diamet	er ▶ 300 mm		400 mm	
Clock type	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>250</b> .321	190	41. <b>250</b> .421	284
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>250</b> .321	245	51. <b>250</b> .421	349
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>250</b> .321	325	52. <b>250</b> .421	429
Slave clock, minute pulse 1260 V	71. <b>250</b> .321	205	71. <b>250</b> .421	289
Slave clock, minute/second pulse 12/24 V	72. <b>250</b> .321	430	72. <b>250</b> .421	514
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>250</b> .321	570	73. <b>250</b> .421	654
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>250</b> .321	615	74. <b>250</b> .421	699
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>250</b> .321	590	75. <b>250</b> .421	674
Telegram slave clock, DCFport24	81. <b>250</b> .321	230	81. <b>250</b> .421	324
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>250</b> .321	334	84. <b>250</b> .421	428
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>250</b> .321	394	85. <b>250</b> .421	488
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>250</b> .321	379	91. <b>250</b> .421	473

Options	300 mm Suffix	n Surcharge € each	400 r Suffi	mm Surcharge x € each
Case enamelled in traffic white RAL 9016	-00	none	-00	none
Case enamelled in jet black RAL 9005	-01	none	-01	none
Case enamelled in metallic dark gun metal DB 703	-06	none	-06	none
Case custom enamelled	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	89	-20	109
Low reflectivity front glass	-50	on request	-50	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59		fitted as standard
Packaging against dust and spray (IP 54)	-54	69	-54	69
Snap-tight mounting fixture	-57	49	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169.–

## Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
traffic white RAL 9016	-00
jet black RAL 9005	-01
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



Indoor analog single face















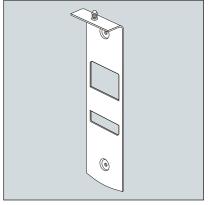








Highly presentable clocks for demanding environments a professional means of showing the time.



This Snap-tight fixture (option -57) prevents the clock from dropping or being wrenched off. Screw fixture to the wall, attach clock - done! No protection against thrown balls.



Optionally available with case enamelled in



cir. 300 mm diameter

cir. 400 mm diameter

very sturdy metal case, as standard enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in colours (see list below).

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

## **Snap-tight fixture (option)**

As an option, these clocks are available with an additional mounting fixture to prohibit dropping or wrenching off. No protection against thrown balls.

#### Front glass

Domed mineral glass on 300 mm case, shock-resistant Plexiglas® XT on 400 mm case as standard. As an option, low reflectivity front glass is available.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### **Face**

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 V AC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



**Indoor** analog single face

# Type series 250























## DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24 PEWETA AirPort24 slave clocks

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

face diameter ► Clock type	300 mm Item No.	€ each	400 mm Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>250</b> .331	190	41. <b>250</b> .431	284
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>250</b> .331	245	51. <b>250</b> .431	349
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>250</b> .331	325	52. <b>250</b> .431	429
Slave clock, minute pulse 1260 V	71. <b>250</b> .331	205	71. <b>250</b> .431	289
Slave clock, minute/second pulse 12/24 V	72. <b>250</b> .331	430	72. <b>250</b> .431	514
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>250</b> .331	570	73. <b>250</b> .431	654
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>250</b> .331	615	74. <b>250</b> .431	699
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>250</b> .331	590	75. <b>250</b> .431	674
Telegram slave clock, DCFport24	81. <b>250</b> .331	230	81. <b>250</b> .431	324
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>250</b> .331	334	84. <b>250</b> .431	428
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>250</b> .331	394	85. <b>250</b> .431	488
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>250</b> .331	379	91. <b>250</b> .431	473

	1200	6 1	400	c 1
Options	300 mm Suffix	Surcharge € each		m Surcharge € each
•				e cacii
Case enamelled in traffic white RAL 9016	-00	none	-00	none
Case enamelled in jet black RAL 9005	-01	none	-01	none
Case enamelled in metallic dark gun metal DB 703	-06	none	-06	none
Case custom enamelled	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	89	-20	109
Low reflectivity front glass	-50	on request	-50	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	-53	59	fi	tted as standard
Packaging against dust and spray (IP 54)	-54	69	-54	69
Snap-tight mounting fixture	-57	49	-57	49
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
traffic white RAL 9016	-00
jet black RAL 9005	-01
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Indoor Clocks**

single face



Indoor analog single face















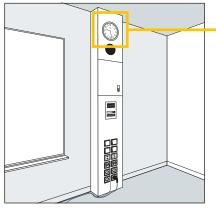








Wall clocks with shock-resistant plastic cases. State-of-the-art, up-to-date, functional – totally reliable!



Media pillar fitted with a type series 270 wall



Installation inside a media pillar by means of a front ring (extra)





cir. 265 mm diameter

cir. 315 mm diameter

cir. 415 mm diameter shock-resistant Plexiglas® XT case with a matted rim. Protection grade IP 40 (EN 60529).

#### Front glass

Shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### **Face**

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

## Power outage reserve























#### DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

face diameter ▶	250 mm		300 mm		400 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>270</b> .211	129	41. <b>270</b> .311	134	41. <b>270</b> .411	179.–
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>270</b> .211	184	51. <b>270</b> .311	189	51. <b>270</b> .411	244
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>270</b> .211	264	52. <b>270</b> .311	269.–	52. <b>270</b> .411	324
Slave clock, minute pulse 1260 V	71. <b>270</b> .211	144	71. <b>270</b> .311	149	71. <b>270</b> .411	184
Slave clock, minute/second pulse 12/24 V	72. <b>270</b> .211	369	72. <b>270</b> .311	374	72. <b>270</b> .411	409
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>270</b> .211	509	73. <b>270</b> .311	514	73. <b>270</b> .411	549
Slave clock, minute pulse 12/24 V, synchronous second hand 230 V AC/50 Hz	74. <b>270</b> .211	554	74. <b>270</b> .311	559	74. <b>270</b> .411	594
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>270</b> .211	529	75. <b>270</b> .311	534	75. <b>270</b> .411	569
Telegram slave clock, DCFport24	81. <b>270</b> .211	169	81. <b>270</b> .311	174	81. <b>270</b> .411	219
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>270</b> .211	273	84. <b>270</b> .311	278	84. <b>270</b> .411	323
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>270</b> .211	333	85. <b>270</b> .311	338.–	85. <b>270</b> .411	383
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>270</b> .211	318	91. <b>270</b> .311	323	91. <b>270</b> .411	368
	250 mm	Surcharge	300 mm	Surcharge	400 mm	Surcharge

Option	Juliix	€ eatii	Juilix	E Each Julia	€ eacii
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	16960	169
Extras	250 mm Item No.	€ each			
	01. <b>270</b> .200	49			
Front ring, 288 mm diameter, for fitting clocks of this type series with a case diameter of 265 mm to media pillars made of 19 mm wood panels <sup>2)</sup>	01. <b>270</b> .220	49			

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

 $<sup>^{\</sup>rm 2)} For \ fitting \ the \ front \ ring, an appropriate cut-out as \ well \ as \ 3 \ mounting$ holes must be provided. Please ask for the scale drawing if required.



# **Indoor Clocks**

single face



**Indoor** analog single face

Type series 270















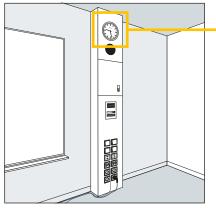




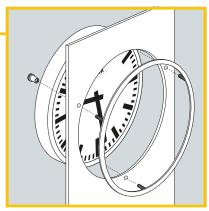




Wall clocks with shock-resistant plastic cases. State-of-the-art, up-to-date, functional – totally reliable!



Media pillar fitted with a type series 270 wall clock



Installation inside a media pillar by means of a front ring (extra)



cir. 265 mm diameter

cir. 315 mm diameter

cir. 415 mm diameter shock-resistant Plexiglas® XT case with a matted rim.

Protection grade IP 40 (EN 60529).

#### Front glass

Shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Face

High distinction white metal with black bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Pointed black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

#### Power outage reserve

DCF77 radio controlled clocks and

€ each Suffix

























clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

face diameter ▶	250 mm		300 mm		400 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>270</b> .221	129	41. <b>270</b> .321	134	41. <b>270</b> .421	179.–
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>270</b> .221	184	51. <b>270</b> .321	189	51. <b>270</b> .421	244
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>270</b> .221	264.–	52. <b>270</b> .321	269.–	52. <b>270</b> .421	324
Slave clock, minute pulse 1260 V	71. <b>270</b> .221	144	71. <b>270</b> .321	149	71. <b>270</b> .421	184
Slave clock, minute/second pulse 12/24 V	72. <b>270</b> .221	369	72. <b>270</b> .321	374	72. <b>270</b> .421	409
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>270</b> .221	509	73. <b>270</b> .321	514	73. <b>270</b> .421	549
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>270</b> .221	554	74. <b>270</b> .321	559	74. <b>270</b> .421	594
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>270</b> .221	529	75. <b>270</b> .321	534	75. <b>270</b> .421	569
Telegram slave clock, DCFport24	81. <b>270</b> .221	169	81. <b>270</b> .321	174	81. <b>270</b> .421	219
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>270</b> .221	273	84. <b>270</b> .321	278	84. <b>270</b> .421	323
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>270</b> .221	333	85. <b>270</b> .321	338	85. <b>270</b> .421	383
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>270</b> .221	318	91. <b>270</b> .321	323	91. <b>270</b> .421	368
	250 mm	Surcharge	300 mm	Surcharge	400 mm	Surcharge

option .	Dailin	c cacii s	on count	Julia	C Cucii
External DCF77 receiving aerial (cannot be added later)	-60	169	-60 169.–	-60	169
Extras	250 mm Item No.	€ each			
Front ring, 288 mm diameter, for fitting clocks of this type series with a case diameter of 265 mm to media pillars made of 1.5 mm steel panels <sup>2)</sup>	01. <b>270</b> .200	49			
Front ring, 288 mm diameter, for fitting clocks of this type series with a case diameter of 265 mm to media pillars made of 19 mm wood panels <sup>2)</sup>	01. <b>270</b> .220	49			

Suffix

€ each Suffix

## Options – just as you like them ...

Option

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

 $<sup>^{\</sup>rm 2)} For \ fitting \ the \ front \ ring, an appropriate cut-out as \ well \ as \ 3 \ mounting$ holes must be provided. Please ask for the scale drawing if required.



## **Indoor Clocks**

single face



Indoor analog single face



















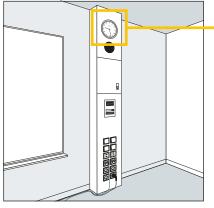




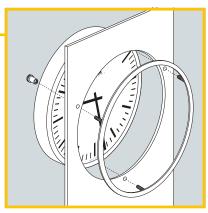




Wall clocks with shock-resistant plastic cases. State-of-the-art, up-to-date, functional totally reliable!



Media pillar fitted with a type series 270 wall



Installation inside a media pillar by means of a front ring (extra)



cir. 265 mm diameter

cir. 315 mm diameter

cir. 415 mm diameter shock-resistant Plexiglas® XT case with a matted rim. Protection grade IP 40 (EN 60529).

#### Front glass

Shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### **Face**

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

#### Power outage reserve

DCF77 radio controlled clocks and in case of a mains power outage.

























clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial

#### PEWETA DCFport24

(option).

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days

face diameter ► Clock type	250 mm Item No.	€ each	300 mm Item No.	€ each	400 mm Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>270</b> .231	129.–	41. <b>270</b> .331	134	41. <b>270</b> .431	179.–
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>270</b> .231	184	51. <b>270</b> .331	189	51. <b>270</b> .431	244
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>270</b> .231	264	52. <b>270</b> .331	269	52. <b>270</b> .431	324
Slave clock, minute pulse 1260 V	71. <b>270</b> .231	144	71. <b>270</b> .331	149	71. <b>270</b> .431	184
Slave clock, minute/second pulse 12/24 V	72. <b>270</b> .231	369	72. <b>270</b> .331	374	72. <b>270</b> .431	409
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>270</b> .231	509	73. <b>270</b> .331	514	73. <b>270</b> .431	549
Slave clock, minute pulse 12/24 V, synchronous second hand 230 V AC/50 Hz	74. <b>270</b> .231	554	74. <b>270</b> .331	559	74. <b>270</b> .431	594
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>270</b> .231	529	75. <b>270</b> .331	534	75. <b>270</b> .431	569
Telegram slave clock, DCFport24	81. <b>270</b> .231	169	81. <b>270</b> .331	174	81. <b>270</b> .431	219
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>270</b> .231	273	84. <b>270</b> .331	278	84. <b>270</b> .431	323
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>270</b> .231	333	85. <b>270</b> .331	338	85. <b>270</b> .431	383
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>270</b> .231	318	91. <b>270</b> .331	323	91. <b>270</b> .431	368
Option	250 mm Suffix	Surcharge € each		Surcharge € each		Surcharge € each
External DCF77 receiving aerial (cannot be added later)	-60	169		169		169

o paron	Julia	c cae	Duillix C Cuell	Julian	e caeii
External DCF77 receiving aerial (cannot be added later)	-60	169	-60 169	-60	169
Extras	250 mm Item No.	€ each			
Front ring, 288 mm diameter, for fitting clocks of this type series with a case diameter of 265 mm to media pillars made of 1.5 mm steel panels <sup>2)</sup>	01. <b>270</b> .200	49			
Front ring, 288 mm diameter, for fitting clocks of this type series with a case diameter of 265 mm to media pillars made of 19 mm wood panels <sup>2)</sup>	01. <b>270</b> .220	49			

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

 $<sup>^{\</sup>rm 2)} For \ fitting \ the \ front \ ring, an appropriate cut-out as \ well \ as \ 3 \ mounting$ holes must be provided. Please ask for the scale drawing if required.



# **Indoor Clocks**

single face



Indoor analog single face





























Wall clocks with sturdy **metal cases.** State-of-the-art, up-to-date, functional – totally reliable!



Slave clock, minute pulse 12...60 V



- cir. 265 mm diameter
- cir. 300 mm diameter
- cir. 400 mm diameter

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Front glass

Flat shock-resistant Plexiglas® XT on 265 mm diameter cases, domed mineral glass on 300 mm diameter cases and shock-resistant Plexiglas® XT on 400 mm cases.

#### Face

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks



DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.



**Indoor** analog single face

# Type series **271**























clocks
DCF77 radio controlled clocks
will only function correctly
within a radius of approx.
1,500 km around Mainflingen
(50 km east of Frankfurt/M.)
and under conditions of free
radio propagation and may
be impaired in heavily reinforced concrete structures.
For this case we recommend
a remotable DCF77 aerial
(option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24 PEWETA AirPort24 slave clocks

require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

face diameter 300 mm 250 mm 400 mm Clock type € each Item No. € each € each Item No. Item No Quartz clock, battery operated 1.5 V 41.**271**.211 **178.-** 41.**271**.311 180.- 41.271.411 274.-DCF77 radio controlled clock, battery operated 1.5 V 51.**271**.211 233.-51.**271**.311 235.-51.**271**.411 339.-DCF77 radio controlled clock, mains operated 230 VAC, 419.-52.**271**.311 315.-52.**271**.411 52.271.211 313.with outage reserve Slave clock, minute pulse 12...60 V 71.**271**.211 193.-71.**271**.311 195.-71.**271**.411 279.-Slave clock, minute/second pulse 12/24 V 72.**271**.211 **418.-** 72.**271**.311 420.-72.**271**.411 504.-Slave clock, minute/second pulse 12/24 V, extra low noise motion 558.-560.-644.-73.**271**.211 73.**271**.311 73.**271**.411 Slave clock, minute pulse 12/24 V, synchronous second hand 689.-74.271.211 603.-74.**271**.311 605.-74.**271**.411 230 VAC/50 Hz Slave clock, second pulse 12/24 V, with creeping minute hand 75.**271**.211 578.-75.**271**.311 580.-75.**271**.411 664.-Telegram slave clock, DCFport24 81.**271**.211 **218.-** 81.**271**.311 220.- 81.271.411 314.-322.-84.**271**.411 418.-RC telegram slave clock, AirPort24, battery operated 1.5 V 84.271.211 84.**271**.311 324.-RC telegram slave clock, AirPort24, mains operated 230 VAC, 85.**271**.211 382.-85.**271**.311 384.-85.**271**.411 478.with outage reserve NTP system clock (NTP client), synchronisation by LAN, PoE<sup>1)</sup> **367.-** 91.**271**.311 **369.-** 91.**271**.411 91.**271**.211 463.-

Options	250 suffi			n Surcharge € each		
Case enamelled in metallic silver grey RAL 9006	-05	10	-05	10	-05	10
Case enamelled in metallic dark gun metal DB 703	-06	10	-06	10	-06	10
Case custom enamelled	-10	on request	-10	on request	-10	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)		fitted as standard	-53	59		fitted as standard
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169	-60	169

## Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
custom enamelled	-10

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Indoor Clocks**

single face



Indoor analog single face

























Wall clocks with sturdy metal cases. State-of-the-art, up-todate, functional - totally reliable!



Optionally available with case enamelled in metallic silver grey RAL 9006





- cir. 265 mm diameter
- cir. 300 mm diameter
- cir. 400 mm diameter

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Front glass

Flat shock-resistant Plexiglas® XT on 265 mm diameter cases, domed mineral glass on 300 mm diameter cases and shock-resistant Plexiglas® XT on 400 mm cases.

#### Face

High distinction white metal with black DIN bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Pointed black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.



DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.



Indoor analog single face

# Type series 271























## PEWETA DCFport24

(option).

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

a remotable DCF77 aerial

## PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

face diameter 300 mm 250 mm 400 mm Clock type € each Item No. € each € each Item No. Item No Quartz clock, battery operated 1.5 V 41.**271**.221 **178.-** 41.**271**.321 **180.-** 41.**271**.421 274.-DCF77 radio controlled clock, battery operated 1.5 V 51.271.221 233.-51.**271**.321 235.-51.**271**.421 339.-DCF77 radio controlled clock, mains operated 230 VAC, 419.-52.**271**.221 52.**271**.321 315.-52.**271**.421 313.with outage reserve Slave clock, minute pulse 12...60 V 71.**271**.221 193.-71.**271**.321 195.-71.**271**.421 279.-Slave clock, minute/second pulse 12/24 V 72.**271**.221 **418.-** 72.**271**.321 420.-72.**271**.421 504.-Slave clock, minute/second pulse 12/24 V, extra low noise motion 558.-560.-644.-73.**271**.221 73.**271**.321 73.**271**.421 Slave clock, minute pulse 12/24 V, synchronous second hand 689.-74.271.221 603.-74.**271**.321 605.-74.**271**.421 230 VAC/50 Hz Slave clock, second pulse 12/24 V, with creeping minute hand 75.**271**.221 578.-75.**271**.321 580.-75.**271**.421 664.-Telegram slave clock, DCFport24 81.271.221 **218.-** | 81.**271**.321 **220.-** 81.**271**.421 314.-RC telegram slave clock, AirPort24, battery operated 1.5 V 418.-84.271.221 322.-84.**271**.321 324.-84.**271**.421 RC telegram slave clock, AirPort24, mains operated 230 VAC, 85.**271**.221 382.-85.**271**.321 384.-85.**271**.421 478.with outage reserve NTP system clock (NTP client), synchronisation by LAN, PoE<sup>1)</sup> **367.-** 91.**271**.321 **369.-** 91.**271**.421 91.271.221 463.-

Options	250 n Suffix			Surcharge € each		
Case enamelled in metallic silver grey RAL 9006	-05	10	-05	10	-05	10
Case enamelled in metallic dark gun metal DB 703	-06	10	-06	10	-06	10
Case custom enamelled	-10	on request	-10	on request	-10	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	f	fitted as standard	-53	59		fitted as standard
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169	-60	169

## Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Indoor Clocks**

single face



Indoor analog single face



























Wall clocks with sturdy metal cases. State-of-the-art, up-todate, functional - totally reliable!



Slave clock, minute pulse 12...60 V





- cir. 265 mm diameter
- cir. 300 mm diameter
- cir. 400 mm diameter

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Front glass

Flat shock-resistant Plexiglas® XT on 265 mm diameter cases, domed mineral glass on 300 mm diameter cases and shock-resistant Plexiglas® XT on 400 mm cases.

#### Face

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks



DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

580.-

75.**271**.431

**220.-** 81.**271**.431

**324.-** 84.**271**.431

664.-

314.-

418.-

169.-



Indoor analog single face

# Type series

























clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PFWFTA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

75.**271**.231

81.271.231

84.271.231

**578.-** 75.**271**.331

**218.-** 81.**271**.331

**322.-** 84.**271**.331

169.- -60

with outage reserve	85. <b>271</b> .231	382	85. <b>271</b> .331	384	85. <b>271</b> .431	478
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>271</b> .231	367	91. <b>271</b> .331	369	91. <b>271</b> .431	463
	250 mm	Surcharge	300 mm	Surcharge		Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	10	-05	10	-05	10
Case enamelled in metallic dark gun metal DB 703	-06	10	-06	10	-06	10
Case custom enamelled	-10	on request	-10	on request	-10	on request
Shock-resistant Plexiglas® XT (instead of mineral glass)	fitted	as standard	-53	59	fitted	as standard

-60

#### Options – just as you like them ...

Telegram slave clock, DCFport24

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

External DCF77 receiving aerial (cannot be added later)

Slave clock, second pulse 12/24 V, with creeping minute hand

RC telegram slave clock, AirPort24, battery operated 1.5 V

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10

169.– -60

face diameter 300 mm 250 mm 400 mm Clock type € each Item No. € each € each Item No. Item No. Quartz clock, battery operated 1.5 V 41.**271**.231 **178.-** 41.**271**.331 **180.-** 41.**271**.431 274.-DCF77 radio controlled clock, battery operated 1.5 V 51.271.231 233.-51.**271**.331 235.-51.**271**.431 339.-DCF77 radio controlled clock, mains operated 230 VAC, 419.-52.**271**.231 313.-52.**271**.331 315.-52.**271**.431 with outage reserve Slave clock, minute pulse 12...60 V 71.**271**.231 193.-71.**271**.331 195.-71.**271**.431 279.-Slave clock, minute/second pulse 12/24 V 72.271.231 **418.-** 72.**271**.331 420.-72.**271**.431 504.-Slave clock, minute/second pulse 12/24 V, extra low noise motion 558.-560.-644.-73.**271**.231 73.**271**.331 73.**271**.431 Slave clock, minute pulse 12/24 V, synchronous second hand 74.**271**.331 74.**271**.431 689.-74.271.231 603.-605.-230 VAC/50 Hz

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Indoor Clocks**

double face



**Indoor** analog double face

Type series 272



















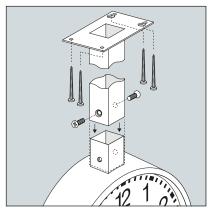




Double face clocks for all places where time must be readable from either side. Robust metal, fit everywhere!



Metal cover for wall or ceiling mounting brackets available as an option



81.**272**.312 shown

Detachable ceiling mounting in any length desired (e.g. for suspension beneath a false ceiling), available as an option (Suffix -29)



- cir. 270 mm diameter
- cir. 320 mm diameter
- cir. 420 mm diameter

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, the case may be enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of very sturdy wall or ceiling mounting brackets, standard length cir. 150 mm. For custom lengths or custom mounting options see table below.

#### Front glasses

Flat, shock-resistant Plexiglas® XT for outstandingly clear visibility.

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Faces printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hands.

No second hands on DCF77 and AirPort24 radio controlled clocks and on minute pulse 12...60 V controlled slave clocks.

#### Double face clocks

Double face clocks come completely wired and pre-assembled. Just mount them and plug in - that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



Indoor analog double face

Type series

















clocks







DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

	e diameter  Mounting	250 mm Item No.	€ each	300 mm Item No.	€ each	400 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5 V <sup>1) 2</sup>		51. <b>272</b> .212 51. <b>272</b> .213		51. <b>272</b> .312 51. <b>272</b> .313		51. <b>272</b> .412 51. <b>272</b> .413	825 825
DCF77 radio controlled clock, mains operated 230 VAC		52. <b>272</b> .212 52. <b>272</b> .213		52. <b>272</b> .312 52. <b>272</b> .313		52. <b>272</b> .412 52. <b>272</b> .413	865 865
Slave clock, minute pulse 1260 V		71. <b>272</b> .212 71. <b>272</b> .213		71. <b>272</b> .312 71. <b>272</b> .313		71. <b>272</b> .412 71. <b>272</b> .413	539 539
Slave clock, minute/second pulse 12/24 V		72. <b>272</b> .212 72. <b>272</b> .213		72. <b>272</b> .312 72. <b>272</b> .313		72. <b>272</b> .412 72. <b>272</b> .413	989 989
Slave clock, minute/second pulse 12/24 V, extra low noise motion		74. <b>272</b> .212 74. <b>272</b> .213		74. <b>272</b> .312 74. <b>272</b> .313	•	74. <b>272</b> .412 74. <b>272</b> .413	1,359 1,359
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz		75. <b>272</b> .212 75. <b>272</b> .213		75. <b>272</b> .312 75. <b>272</b> .313	•	75. <b>272</b> .412 75. <b>272</b> .413	1,309 1,309
Telegram slave clock, DCFport24		81. <b>272</b> .212 81. <b>272</b> .213		81. <b>272</b> .312 81. <b>272</b> .313		81. <b>272</b> .412 81. <b>272</b> .413	585 585
RC telegram slave clock, <i>AirPort24</i> , battery operated 1.5 V <sup>1)</sup>		84. <b>272</b> .212 84. <b>272</b> .213		84. <b>272</b> .312 84. <b>272</b> .313		84. <b>272</b> .412 84. <b>272</b> .413	805 805
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve		85. <b>272</b> .212 85. <b>272</b> .213		85. <b>272</b> .312 85. <b>272</b> .313		85. <b>272</b> .412 85. <b>272</b> .413	845 845
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>		91. <b>272</b> .212 91. <b>272</b> .213		91. <b>272</b> .312 91. <b>272</b> .313		91. <b>272</b> .412 91. <b>272</b> .413	755.– 755.–

Options	250 mm Suffix	Surcharge € each		Surcharge € each		Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	45	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	45	-06	49
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Detachable ceiling mounting (length acc. to customer's choice)	-29	on request	-29	on request	-29	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Metal cover for wall or ceiling mounting brackets	-37	39	-37	39	-37	39
Stainless steel cover V2A for wall or ceiling mounting brackets	-38	95	-38	95	-38	95

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



double face



Indoor analog double face

































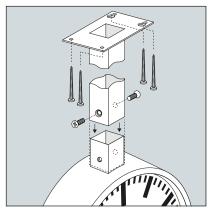




Double face clocks for all places where time must be readable from either side. Robust metal, fit everywhere!



Clock case with lugs (option) for suspension by metal ropes or chains



Detachable ceiling mounting in any length desired (e.g. for suspension beneath a false ceiling), available as an option (Suffix -29)



- cir. 270 mm diameter
- cir. 320 mm diameter
- cir. 420 mm diameter

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, the case may be enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of very sturdy wall or ceiling mounting brackets, standard length cir. 150 mm. For custom lengths or custom mounting options see table below.

#### Front glasses

Flat, shock-resistant Plexiglas® XT for outstandingly clear visibility.

High distinction white metal with black DIN bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Pointed black bar-type hour and minute hands, red second hands.

No second hands on DCF77 and AirPort24 radio controlled clocks and on minute pulse 12...60 V controlled slave clocks.

#### Double face clocks

Double face clocks come completely wired and pre-assembled. Just mount them and plug in - that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



Indoor analog double face

Type series























DCF77 radio controlled

## clocks DCF77 radio controlled clocks of this type series will be sup-

plied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

Fac	e diameter >	250 mm		300 mm		400 mm	
▼ Clock type	<b>Mounting ▼</b>	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5 V1)	<sup>2)</sup> wall	51. <b>272</b> .222	675	51. <b>272</b> .322	745	51. <b>272</b> .422	825
	ceiling	51. <b>272</b> .223	675	51. <b>272</b> .323	745	51. <b>272</b> .423	825
DCF77 radio controlled clock, mains operated 230 VA	C <sup>2)</sup> wall	52. <b>272</b> .222	715	52. <b>272</b> .322	785	52. <b>272</b> .422	865
	ceiling	52. <b>272</b> .223	715.–	52. <b>272</b> .323	785	52. <b>272</b> .423	865
Slave clock, minute pulse 1260 V	wall	71. <b>272</b> .222	419	71. <b>272</b> .322	459	71. <b>272</b> .422	539
	ceiling	71. <b>272</b> .223	419	71. <b>272</b> .323	459	71. <b>272</b> .423	539
Slave clock, minute/second pulse 12/24 V	wall	72. <b>272</b> .222	869	72. <b>272</b> .322	909	72. <b>272</b> .422	989
	ceiling	72. <b>272</b> .223	869	72. <b>272</b> .323	909	72. <b>272</b> .423	989
Slave clock, minute/second pulse 12/24 V,	wall	74. <b>272</b> .222	1,239	74. <b>272</b> .322	1,279	74. <b>272</b> .422	1,359
extra low noise motion	ceiling	74. <b>272</b> .223	1,239	74. <b>272</b> .323	1,279	74. <b>272</b> .423	1,359
Slave clock, minute pulse 12/24 V,	wall	75. <b>272</b> .222	1,189	75. <b>272</b> .322	1,229	75. <b>272</b> .422	1,309
synchronous second hand 230 VAC/50 Hz	ceiling	75. <b>272</b> .223	1,189.–	75. <b>272</b> .323	1,229	75. <b>272</b> .423	1,309
Telegram slave clock, DCFport24	wall	81. <b>272</b> .222	465	81. <b>272</b> .322	505	81. <b>272</b> .422	585
	ceiling	81. <b>272</b> .223	465	81. <b>272</b> .323	505	81. <b>272</b> .423	585
RC telegram slave clock, AirPort24,	wall	84. <b>272</b> .222	685	84. <b>272</b> .322	725	84. <b>272</b> .422	805
battery operated 1.5 V <sup>1)</sup>	ceiling	84. <b>272</b> .223	685	84. <b>272</b> .323	725	84. <b>272</b> .423	805
RC telegram slave clock, AirPort24,	wall	85. <b>272</b> .222	725	85. <b>272</b> .322	765	85. <b>272</b> .422	845
mains operated 230 VAC, with outage reserve	ceiling	85. <b>272</b> .223	725	85. <b>272</b> .323	765	85. <b>272</b> .423	845
NTP system clock (NTP client),	wall	91. <b>272</b> .222		91. <b>272</b> .322		91. <b>272</b> .422	755
synchronisation by LAN, PoE <sup>3)</sup>	ceiling	91. <b>272</b> .223	635	91. <b>272</b> .323	675	91. <b>272</b> .423	755

Options	250 mm Suffix	Surcharge € each		Surcharge € each		Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	45	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	45	-06	49
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Detachable ceiling mounting (length acc. to customer's choice)	-29	on request	-29	on request	-29	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Metal cover for wall or ceiling mounting brackets	-37	39	-37	39	-37	39
Stainless steel cover V2A for wall or ceiling mounting brackets	-38	95	-38	95	-38	95

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



double face



Indoor analog double face























Double face clocks for all places where time must be readable from either side. Robust metal, fit everywhere!



Metal cover for wall or ceiling mounting brackets available as an option



Clock case with lugs (option) for suspension by metal ropes or chains



- cir. 270 mm diameter
- cir. 320 mm diameter
- cir. 420 mm diameter

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, the case may be enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of very sturdy wall or ceiling mounting brackets, standard length cir. 150 mm. For custom lengths or custom mounting options see table below.

#### Front glasses

Flat, shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Faces

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hands.

No second hands on DCF77 and AirPort24 radio controlled clocks and on minute pulse 12...60 V controlled slave clocks.

#### Double face clocks

Double face clocks come completely wired and pre-assembled.

Just mount them and plug in – that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



Indoor analog double face

Type series 272



















## DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## **PEWETA DCFport24**PEWETA DCFport24 slave

PEWEIA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

Fa	ce diameter ▶	250 mm		300 mm		400 mm	
▼ Clock type	<b>Mounting</b> ▼	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5 V <sup>1</sup>	) 2) wall	51. <b>272</b> .232	675	51. <b>272</b> .332	745	51. <b>272</b> .432	825
	ceiling	51. <b>272</b> .233	675	51. <b>272</b> .333	745	51. <b>272</b> .433	825
DCF77 radio controlled clock, mains operated 230 VA	AC 2) wall	52. <b>272</b> .232	715	52. <b>272</b> .332	785	52. <b>272</b> .432	865
	ceiling	52. <b>272</b> .233	715.–	52. <b>272</b> .333	785	52. <b>272</b> .433	865
Slave clock, minute pulse 1260 V	wall	71. <b>272</b> .232	419	71. <b>272</b> .332	459	71. <b>272</b> .432	539
	ceiling	71. <b>272</b> .233	419	71. <b>272</b> .333	459	71. <b>272</b> .433	539
Slave clock, minute/second pulse 12/24 V	wall	72. <b>272</b> .232	869	72. <b>272</b> .332	909	72. <b>272</b> .432	989
	ceiling	72. <b>272</b> .233	869	72. <b>272</b> .333	909	72. <b>272</b> .433	989
Slave clock, minute/second pulse 12/24 V,	wall	74. <b>272</b> .232	1,239	74. <b>272</b> .332	1,279	74. <b>272</b> .432	1,359
extra low noise motion	ceiling	74. <b>272</b> .233	1,239	74. <b>272</b> .333	1,279	74. <b>272</b> .433	1,359
Slave clock, minute pulse 12/24 V,	wall	75. <b>272</b> .232	1,189	75. <b>272</b> .332	1,229	75. <b>272</b> .432	1,309
synchronous second hand 230 VAC/50 Hz	ceiling	75. <b>272</b> .233	1,189	75. <b>272</b> .333	1,229	75. <b>272</b> .433	1,309
Telegram slave clock, DCFport24	wall	81. <b>272</b> .232	465	81. <b>272</b> .332	505	81. <b>272</b> .432	585
	ceiling	81. <b>272</b> .233	465	81. <b>272</b> .333	505	81. <b>272</b> .433	585
RC telegram slave clock, AirPort24,	wall	84. <b>272</b> .232	685	84. <b>272</b> .332	725	84. <b>272</b> .432	805
battery operated 1.5 V <sup>1)</sup>	ceiling	84. <b>272</b> .233	685	84. <b>272</b> .333	725	84. <b>272</b> .433	805
RC telegram slave clock, AirPort24,	wall	85. <b>272</b> .232	725	85. <b>272</b> .332	765	85. <b>272</b> .432	845
mains operated 230 VAC, with outage reserve	ceiling	85. <b>272</b> .233	725	85. <b>272</b> .333	765	85. <b>272</b> .433	845
NTP system clock (NTP client),	wall	91. <b>272</b> .232		91. <b>272</b> .332		91. <b>272</b> .432	755
synchronisation by LAN, PoE <sup>3)</sup>	ceiling	91. <b>272</b> .233	635	91. <b>272</b> .333	675	91. <b>272</b> .433	755

	250 mm	Surcharge	300 mm	Surcharge	400 mm	Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	45	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	45	-06	49
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Detachable ceiling mounting (length acc. to customer's choice)	-29	on request	-29	on request	-29	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Metal cover for wall or ceiling mounting brackets	-37	39	-37	39	-37	39
Stainless steel cover V2A for wall or ceiling mounting brackets	-38	95	-38	95	-38	95

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



**Indoor** analog single face

Type series 280





















Wall clocks with shock-resistant **plastic cases**. State-of-the-art, up-to-date, functional – totally reliable!



Slave clock, minute pulse 12...60 V





cir. 275 x 275 mm

cir. 325 x 325 mm

cir. 425 x 425 mm

shock-resistant Plexiglas® XT case with a matted rim.

Protection grade IP 40 (EN 60529).

#### Front glass

Shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### **Face**

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

#### Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

Face dimensions	250 x 250 mm		300 x 300 mm		400 x 400 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>280</b> .211	129	41. <b>280</b> .311	134	41.280.411	179
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>280</b> .211	184	51. <b>280</b> .311	189	51. <b>280</b> .411	244
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>280</b> .211	264	52. <b>280</b> .311	269	52. <b>280</b> .411	324
Slave clock, minute pulse 1260 V	71. <b>280</b> .211	144	71. <b>280</b> .311	149	71. <b>280</b> .411	184
Slave clock, minute/second pulse 12/24 V	72. <b>280</b> .211	369	72. <b>280</b> .311	374	72. <b>280</b> .411	409
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>280</b> .211	509	73. <b>280</b> .311	514	73. <b>280</b> .411	549
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>280</b> .211	554	74. <b>280</b> .311	559	74. <b>280</b> .411	594
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>280</b> .211	529	75. <b>280</b> .311	534	75. <b>280</b> .411	569
Telegram slave clock, DCFport24	81. <b>280</b> .211	169	81. <b>280</b> .311	174	81. <b>280</b> .411	219
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>280</b> .211	273	84. <b>280</b> .311	278	84. <b>280</b> .411	323
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>280</b> .211	333	85. <b>280</b> .311	338	85. <b>280</b> .411	383
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>280</b> .211	318	91. <b>280</b> .311	323	91. <b>280</b> .411	368
	250x250mm S	urcharge	200 v 200 mm	urcharge	400×400mm	Surcharge

Option	250x250mm Suffix	Surcharge € each		Surcharge € each		Surcharge € each
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169	-60	169

























#### DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

 $<sup>^{\</sup>rm 1)}\,{\rm NTP}$  system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



Indoor analog single face

280





















Wall clocks with shock-resistant plastic cases. State-of-the-art, up-to-date, functional – totally reliable!



Telegram slave clock



cir. 275 x 275 mm

cir. 325 x 325 mm

cir. 425 x 425 mm

shock-resistant Plexiglas® XT case with a matted rim.

Protection grade IP 40 (EN 60 529).

#### Front glass

Shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Face

High distinction white metal with black DIN bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Pointed black bar-type hour and minute hands, red second hand. No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

#### Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

Type series
280























clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial

(option).

PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PFWFTA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

Face dimensions ▶ 250 x 250 mm 300 x 300 mm 400 x 400 mm Clock type € each € each € each Item No. Item No. Item No. Quartz clock, battery operated 1.5 V 41.**280**.221 **129.-** 41.**280**.321 **134.-** 41.**280**.421 179.-DCF77 radio controlled clock, battery operated 1.5 V 51.**280**.221 184.-51.**280**.321 189.-51.**280**.421 244.-DCF77 radio controlled clock, mains operated 230 VAC, 52.**280**.421 52.**280**.221 52.**280**.321 269.-324.-264.with outage reserve Slave clock, minute pulse 12...60 V 71.280.221 144.-71.**280**.321 149.-71.**280**.421 184.-Slave clock, minute/second pulse 12/24 V 72.**280**.221 369.-72.**280**.321 374.-72.**280**.421 409.-549.-Slave clock, minute/second pulse 12/24 V, extra low noise motion 73.**280**.421 73.**280**.221 509.-73.**280**.321 514.-Slave clock, minute pulse 12/24 V 74.280.221 74.**280**.321 74.**280**.421 594.-554.-559.synchronous second hand 230 VAC/50 Hz Slave clock, second pulse 12/24 V, with creeping minute hand 75.**280**.221 529.-75.**280**.321 534.-75.**280**.421 569.-Telegram slave clock, DCFport24 81.**280**.221 **169.-** 81.**280**.321 174.-81.**280**.421 219.-84.280.221 84.**280**.321 84.**280**.421 RC telegram slave clock, AirPort24, battery operated 1.5 V 273.-278.-323.-RC telegram slave clock, AirPort24, mains operated 230 VAC, 85.**280**.221 333.-85.**280**.321 338.-85.**280**.421 383.with outage reserve NTP system clock (NTP client), synchronisation by LAN, PoE<sup>1)</sup> 91.280.221 **318.-** 91.**280**.321 **323.-** 91.**280**.421 368.-250x250mm Surcharge 300x300mm Surcharge 400x400mm Surcharge € each Suffix € each Suffix **Suffix** € each External DCF77 receiving aerial (cannot be added later) -60 169.- | -60 169.- | -60 169.-

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



Indoor analog single face

280

































Wall clocks with shock-resistant plastic cases. State-of-the-art, up-to-date, functional totally reliable!



Slave clock, minute pulse 12...60 V





cir. 275 x 275 mm

cir. 325 x 325 mm

cir. 425 x 425 mm

shock-resistant Plexiglas® XT case with a matted rim.

Protection grade IP 40 (EN 60 529).

#### Front glass

Shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Face

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks



**Indoor** analog single face

#### Power outage reserve

DCF77 radio controlled clocks and *AirPort24* slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.





















## DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

Face dimensions ▶ 250 x 250 mm 300 x 300 mm 400 x 400 mm Clock type € each € each € each Item No. Item No. Item No. Quartz clock, battery operated 1.5 V 41.**280**.231 **129.-** 41.**280**.331 **134.-** 41.**280**.431 179.-DCF77 radio controlled clock, battery operated 1.5 V 51.**280**.231 184.-51.**280**.331 189.-51.**280**.431 244.-DCF77 radio controlled clock, mains operated 230 VAC, 52.**280**.431 52.**280**.231 52.**280**.331 269.-324.-264.with outage reserve Slave clock, minute pulse 12...60 V 71.280.231 144.-71.**280**.331 149.-71.**280**.431 184.-Slave clock, minute/second pulse 12/24 V 72.**280**.231 369.-72.**280**.331 374.-72.**280**.431 409.-549.-Slave clock, minute/second pulse 12/24 V, extra low noise motion 73.**280**.431 73.**280**.231 509.-73.**280**.331 514.-Slave clock, minute pulse 12/24 V 74.**280**.231 74.**280**.331 74.**280**.431 594.-554.-559.synchronous second hand 230 VAC/50 Hz Slave clock, second pulse 12/24 V, with creeping minute hand 75.**280**.231 529.-75.**280**.331 534.-75.**280**.431 569.-Telegram slave clock, DCFport24 81.**280**.231 **169.-** 81.**280**.331 174.-81.**280**.431 219.-84.280.231 84.**280**.331 84.**280**.431 RC telegram slave clock, AirPort24, battery operated 1.5 V 273.-278.-323.-RC telegram slave clock, AirPort24, mains operated 230 VAC, 85.**280**.231 333.-85.**280**.331 338.-85.**280**.431 383.with outage reserve NTP system clock (NTP client), synchronisation by LAN, PoE<sup>1)</sup> 91.280.231 **318.-** 91.**280**.331 **323.-** 91.**280**.431 368.-250x250mm Surcharge 300x300mm Surcharge 400x400mm Surcharge € each Suffix € each Suffix **Suffix** € each External DCF77 receiving aerial (cannot be added later) -60 169.- | -60 169.- | -60 169.-

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



Indoor analog single face

281































Wall clocks with sturdy metal cases with shock-resistant front glasses. State-of-the-art, up-todate, functional - totally reliable!



Slave clock, minute pulse 12...60 V



- cir. 275 x 275 mm
- cir. 325 x 325 mm
- cir. 425 x 425 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Front glass

Flat shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### **Face**

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

# single face

## **281**





















clocks
DCF77 radio controlled clocks
Will only function correctly
within a radius of approx.
1,500 km around Mainflingen
(50 km east of Frankfurt/M.)
and under conditions of free
radio propagation and may
be impaired in heavily reinforced concrete structures.
For this case we recommend
a remotable DCF77 aerial
(option).

## PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## PEWETA AirPort24 PEWETA AirPort24 slave clocks

require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

## Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

Face dimensions ▶			300 x 300 mm		400 x 400 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>281</b> .211	178.–	41. <b>281</b> .311	180	41. <b>281</b> .411	274
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>281</b> .211	233	51. <b>281</b> .311	235	51. <b>281</b> .411	339
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>281</b> .211	313	52. <b>281</b> .311	315.–	52. <b>281</b> .411	419.–
Slave clock, minute pulse 1260 V	71. <b>281</b> .211	193	71. <b>281</b> .311	195	71. <b>281</b> .411	279
Slave clock, minute/second pulse 12/24 V	72. <b>281</b> .211	418	72. <b>281</b> .311	420	72. <b>281</b> .411	504
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>281</b> .211	558	73. <b>281</b> .311	560	73. <b>281</b> .411	644
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>281</b> .211	603	74. <b>281</b> .311	605	74. <b>281</b> .411	689.–
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>281</b> .211	578	75. <b>281</b> .311	580	75. <b>281</b> .411	664
Telegram slave clock, DCFport24	81. <b>281</b> .211	218	81. <b>281</b> .311	220	81. <b>281</b> .411	314
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>281</b> .211	322	84. <b>281</b> .311	324	84. <b>281</b> .411	418
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>281</b> .211	382	85. <b>281</b> .311	384	85. <b>281</b> .411	478
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>281</b> .211	367	91. <b>281</b> .311	369	91. <b>281</b> .411	463

Options	250x250 Suffix	mm Surcharge € each		mm Surcharge € each		mm Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	10	-05	10	-05	10
Case enamelled in metallic dark gun metal DB 703	-06	10	-06	10	-06	10
Case custom enamelled	-10	on request	-10	on request	-10	on request
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169	-60	169

All prices are subject to change without notice, packing and shipping cost (see page 185) as well as VAT for deliveries within Germany added.

Prices shown as of January 1st, 2024. If you have any questions or require additional information, please contact us, we will gladly give advice.

## Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



Indoor analog single face

281





















Wall clocks with sturdy metal cases with shock-resistant front glasses. State-of-the-art, up-todate, functional - totally reliable!



Telegram slave clock





- cir. 275 x 275 mm
- cir. 325 x 325 mm
- cir. 425 x 425 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Front glass

Flat shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Face

High distinction white metal with black DIN bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

Pointed black bar-type hour and minute hands, red second hand. No second hand on minute pulse 12...60 V controlled slave clocks.



Indoor analog single face

## Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.























clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24 PFWFTA AirPort24 slave clocks

require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

463.-

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

<sup>300</sup> x 300 mm 400 x 400 mm Face dimensions 250 x 250 mm Clock type € each Item No. € each € each Item No. Item No. Quartz clock, battery operated 1.5 V 41.**281**.221 **178.-** 41.**281**.321 **180.-** 41.**281**.421 274.-DCF77 radio controlled clock, battery operated 1.5 V 51.**281**.221 233.-51.**281**.321 235.-51.**281**.421 339.-DCF77 radio controlled clock, mains operated 230 VAC, 52.**281**.221 52.**281**.321 52.**281**.421 419.-313.-315.with outage reserve Slave clock, minute pulse 12...60 V 71.**281**.221 193.-71.**281**.321 195.-71.**281**.421 279.-Slave clock, minute/second pulse 12/24 V 72.**281**.221 **418.-** 72.**281**.321 420.-72.**281**.421 504.-Slave clock, minute/second pulse 12/24 V, extra low noise motion 73.**281**.321 73.**281**.421 73.**281**.221 558.-560.-644.-Slave clock, minute pulse 12/24 V. 74.**281**.221 74.**281**.321 74.**281**.421 689.-603.-605.synchronous second hand 230 VAC/50 Hz Slave clock, second pulse 12/24 V, with creeping minute hand 75.**281**.221 578.-75.**281**.321 580.-75.**281**.421 664.-Telegram slave clock, DCFport24 81.**281**.221 **218.-** 81.**281**.321 **220.-** 81.**281**.421 314.-84.**281**.221 84.**281**.321 418.-RC telegram slave clock, AirPort24, battery operated 1.5 V 322.-324.-84.**281**.421 RC telegram slave clock, AirPort24, mains operated 230 VAC, 85.**281**.221 382.-85.**281**.321 384.-85.**281**.421 478.with outage reserve

Options	250x250mr Suffix	n Surcharge € each	300x300mn Suffix	n Surcharge € each		n Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	10	-05	10	-05	10
Case enamelled in metallic dark gun metal DB 703	-06	10	-06	10	-06	10
Case custom enamelled	-10	on request	-10	on request	-10	on request
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169	-60	169

91.281.221

**367.-** 91.**281**.321

## Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

NTP system clock (NTP client), synchronisation by LAN, PoE<sup>1)</sup>

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10

**369.-** 91.**281**.421

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



single face



Indoor analog single face

281























Wall clocks with sturdy metal cases with shock-resistant front glasses. State-of-the-art, up-todate, functional - totally reliable!



Slave clock, minute pulse 12...60 V





- cir. 275 x 275 mm
- cir. 325 x 325 mm
- cir. 425 x 425 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Front glass

Flat shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### **Face**

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41091.

Black bar-type hour and minute hands, red second hand.

No second hand on minute pulse 12...60 V controlled slave clocks



Indoor analog

# single face





















clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

## PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24 PEWETA AirPort24 slave clocks

require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

## Power outage reserve

DCF77 radio controlled clocks and AirPort24 slave clocks with a 230 VAC power supply of this type series provide continued operation for approx. 14 days in case of a mains power outage.

Face dimensions	250 x 250 mm		300 x 300 mm		400 x 400 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>281</b> .231	178	41. <b>281</b> .331	180	41. <b>281</b> .431	274
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>281</b> .231	233	51. <b>281</b> .331	235	51. <b>281</b> .431	339
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>281</b> .231	313	52. <b>281</b> .331	315	52. <b>281</b> .431	419
Slave clock, minute pulse 1260 V	71. <b>281</b> .231	193	71. <b>281</b> .331	195	71. <b>281</b> .431	279
Slave clock, minute/second pulse 12/24 V	72. <b>281</b> .231	418	72. <b>281</b> .331	420	72. <b>281</b> .431	504
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>281</b> .231	558	73. <b>281</b> .331	560	73. <b>281</b> .431	644
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>281</b> .231	603	74. <b>281</b> .331	605	74. <b>281</b> .431	689
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>281</b> .231	578	75. <b>281</b> .331	580	75. <b>281</b> .431	664
Telegram slave clock, DCFport24	81. <b>281</b> .231	218	81. <b>281</b> .331	220	81. <b>281</b> .431	314
RC telegram slave clock, AirPort24, battery operated 1.5 V	84. <b>281</b> .231	322	84. <b>281</b> .331	324	84. <b>281</b> .431	418
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>281</b> .231	382	85. <b>281</b> .331	384.–	85. <b>281</b> .431	478
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>1)</sup>	91. <b>281</b> .231	367	91. <b>281</b> .331	369	91. <b>281</b> .431	463

Options	250x250 Suffix	mm Surcharge € each		mm Surcharge € each		mm Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	10	-05	10	-05	10
Case enamelled in metallic dark gun metal DB 703	-06	10	-06	10	-06	10
Case custom enamelled	-10	on request	-10	on request	-10	on request
External DCF77 receiving aerial (cannot be added later)	-60	169	-60	169	-60	169

## Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10

<sup>&</sup>lt;sup>1)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



double face



Indoor analog double face



















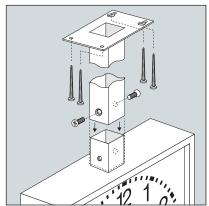




Double face clocks for all places where time must be readable from either side. Robust metal, fit everywhere!



Metal cover for wall or ceiling mounting brackets available as an option



Detachable ceiling mounting in any length desired (e.g. for suspension beneath a false ceiling), available as an option (Suffix -29)



- cir. 285 x 285 mm
- cir. 335 x 335 mm
- cir. 435 x 435 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, the case may be enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of very sturdy wall or ceiling mounting brackets, standard length cir. 150 mm. For custom lengths or custom mounting options see table below.

#### **Front glasses**

Flat, shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Faces

High distinction white metal with black Arabic numerals for easy, doubt-free reading even over longer distances. Faces printed according to DIN 41091.

#### Hands

Black bar-type hour and minute hands, red second hands.

No second hands on DCF77 and AirPort24 radio controlled clocks and on minute pulse 12...60 V controlled slave clocks.

#### Double face clocks

Double face clocks come completely wired and pre-assembled.

Just mount them and plug in – that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



Indoor analog double face

Type series 282



















clocks
DCF77 radio controlled clocks
of this type series will be supplied including a remotable
DCF77 aerial (IP 68). Thus,
optimum reception quality
can be achieved regardless
of the final placement of the
clock itself. However, DCF77
radio controlled clocks will
only function correctly within
a radius of approx. 1,500 km
around Mainfilingen (50 km

## PEWETA DCFport24 PEWETA DCFport24 slave

east of Frankfurt/M.).

PEWEIA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

	Face diameter ▶	250 x 250 mn		300 x 300 mr	_	400 x 400 mm	
▼ Clock type	Mounting <b>V</b>	Item No.	-	Item No.		Item No.	€ each
· · · · · · · · · · · · · · · · · · ·		51. <b>282</b> .212		51. <b>282</b> .312		51. <b>282</b> .412	825
DCF77 radio controlled clock, battery operated 1.5							
D0537 1:		51.282.213		51.282.313		51.282.413	825
DCF77 radio controlled clock, mains operated 230		52. <b>282</b> .212		52. <b>282</b> .312		52. <b>282</b> .412	865
	,	52. <b>282</b> .213		52. <b>282</b> .313		52. <b>282</b> .413	865
Slave clock, minute pulse 1260 V		71. <b>282</b> .212		71. <b>282</b> .312		71. <b>282</b> .412	539
	ceiling	71. <b>282</b> .213	419	71. <b>282</b> .313	459.–	71. <b>282</b> .413	539
Slave clock, minute/second pulse 12/24 V	wall	72. <b>282</b> .212	869	72. <b>282</b> .312	909	72. <b>282</b> .412	989
· ·	ceiling	72. <b>282</b> .213	869	72. <b>282</b> .313	909	72. <b>282</b> .413	989
Slave clock, minute pulse 12/24 V,	wall	74. <b>282</b> .212	1,239,-	74. <b>282</b> .312	1.279	74. <b>282</b> .412	1,359
synchronous second hand 230 VAC/50 Hz	ceiling	74. <b>282</b> .213	1,239	74. <b>282</b> .313	1,279	74. <b>282</b> .413	1,359
Slave clock, second pulse 12/24 V,	wall	75. <b>282</b> .212	1,189	75. <b>282</b> .312	1,229	75. <b>282</b> .412	1,309
with creeping minute hand	ceiling	75. <b>282</b> .213	1,189	75. <b>282</b> .313	1,229	75. <b>282</b> .413	1,309
Telegram slave clock, DCFport24	wall	81. <b>282</b> .212	465	81. <b>282</b> .312	505	81. <b>282</b> .412	585
	ceiling	81. <b>282</b> .213	465	81. <b>282</b> .313	505	81. <b>282</b> .413	585
RC telegram slave clock, AirPort24,	wall	84. <b>282</b> .212	685	84. <b>282</b> .312	725	84. <b>282</b> .412	805
battery operated 1.5 V <sup>1)</sup>	ceiling	84. <b>282</b> .213	685	84. <b>282</b> .313	725	84. <b>282</b> .413	805
RC telegram slave clock, AirPort24,	wall	85. <b>282</b> .212	725	85. <b>282</b> .312	765	85. <b>282</b> .412	845
mains operated 230 VAC, with outage reserve	ceiling	85. <b>282</b> .213	725	85. <b>282</b> .313	765	85. <b>282</b> .413	845
NTP system clock (NTP client),	wall	91. <b>282</b> .212	635	91. <b>282</b> .312	675	91. <b>282</b> .412	755
synchronisation by LAN, PoE <sup>3)</sup>	ceiling	91. <b>282</b> .213		91. <b>282</b> .313		91. <b>282</b> .413	755
, , , , , , , , , , , , , , , , , , , ,							

		nm Surcharge				
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	45	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	45	-06	49
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Detachable ceiling mounting (length acc. to customer's choice)	-29	on request	-29	on request	-29	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Metal cover for wall or ceiling mounting brackets	-37	39	-37	39	-37	39
Stainless steel cover V2A for wall or ceiling mounting brackets	-38	95	-38	95	-38	95

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



double face



Indoor analog double face

















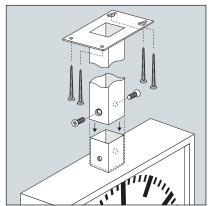




Double face clocks for all places where time must be readable from either side. Robust metal, fit everywhere!



Clock case with lugs (option) for suspension by metal ropes or chains



Detachable ceiling mounting in any length desired (e.g. for suspension beneath a false ceiling), available as an option (Suffix -29)



- cir. 285 x 285 mm
- cir. 335 x 335 mm
- cir. 435 x 435 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, the case may be enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of very sturdy wall or ceiling mounting brackets, standard length cir. 150 mm. For custom lengths or custom mounting options see table below.

#### **Front glasses**

Flat, shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Faces

High distinction white metal with black DIN bar markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Pointed black bar-type hour and minute hands, red second hands.

No second hands on DCF77 and *AirPort24* radio controlled clocks and on minute pulse 12...60 V controlled slave clocks.

#### Double face clocks

Double face clocks come completely wired and pre-assembled.

Just mount them and plug in – that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



**Indoor** analog double face

Type series 282















clocks







DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainfilingen (50 km east of Frankfurt/M.).

## **PEWETA DCFport24**PEWETA DCFport24 slave

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

▼ Clock type		250 x 250 mm Item No.	-	300 x 300 mn Item No.		400 x 400 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 1.	5 V 1) 2) wall	51. <b>282</b> .222 51. <b>282</b> .223	675.–	51. <b>282</b> .322 51. <b>282</b> .323		51. <b>282</b> .422 51. <b>282</b> .423	825 825
DCF77 radio controlled clock, mains operated 230		52. <b>282</b> .222 52. <b>282</b> .223		52. <b>282</b> .322 52. <b>282</b> .323		52. <b>282</b> .422 52. <b>282</b> .423	865 865
Slave clock, minute pulse 1260 V		71. <b>282</b> .222 71. <b>282</b> .223		71. <b>282</b> .322 71. <b>282</b> .323		71. <b>282</b> .422 71. <b>282</b> .423	539 539
Slave clock, minute/second pulse 12/24 V		72. <b>282</b> .222 72. <b>282</b> .223		72. <b>282</b> .322 72. <b>282</b> .323		72. <b>282</b> .422 72. <b>282</b> .423	989 989
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz		74. <b>282</b> .222 74. <b>282</b> .223		74. <b>282</b> .322 74. <b>282</b> .323	•	74. <b>282</b> .422 74. <b>282</b> .423	1,359 1,359
Slave clock, second pulse 12/24 V, with creeping minute hand		75. <b>282</b> .222 75. <b>282</b> .223		75. <b>282</b> .322 75. <b>282</b> .323		75. <b>282</b> .422 75. <b>282</b> .423	1,309 1,309
Telegram slave clock, DCFport24		81. <b>282</b> .222 81. <b>282</b> .223		81. <b>282</b> .322 81. <b>282</b> .323		81. <b>282</b> .422 81. <b>282</b> .423	585 585
RC telegram slave clock, <i>AirPort24</i> , battery operated 1.5 V <sup>1)</sup>		84. <b>282</b> .222 84. <b>282</b> .223		84. <b>282</b> .322 84. <b>282</b> .323		84. <b>282</b> .422 84. <b>282</b> .423	805 805
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve		85. <b>282</b> .222 85. <b>282</b> .223		85. <b>282</b> .322 85. <b>282</b> .323		85. <b>282</b> .422 85. <b>282</b> .423	845 845
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>		91. <b>282</b> .222 91. <b>282</b> .223		91. <b>282</b> .322 91. <b>282</b> .323		91. <b>282</b> .422 91. <b>282</b> .423	755.– 755.–

Options	250x250 Suffix	mm Surcharge € each		mm Surcharge € each		0mm Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	45	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	45	-06	49
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Detachable ceiling mounting (length acc. to customer's choice)	-29	on request	-29	on request	-29	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Metal cover for wall or ceiling mounting brackets	-37	39	-37	39	-37	39
Stainless steel cover V2A for wall or ceiling mounting brackets	-38	95	-38	95	-38	95

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



double face



Indoor analog double face

























Double face clocks for all places where time must be readable from either side. Robust metal, fit everywhere!



Metal cover for wall or ceiling mounting brackets available as an option



Clock case with lugs (option) for suspension by metal ropes or chains





- cir. 285 x 285 mm
- cir. 335 x 335 mm
- cir. 435 x 435 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, the case may be enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

As an option, a stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) is available in a matted finish.

Protection grade IP 40 (EN 60529).

## Mounting

Choice of very sturdy wall or ceiling mounting brackets, standard length cir. 150 mm. For custom lengths or custom mounting options see table below.

#### Front glasses

Flat, shock-resistant Plexiglas® XT for outstandingly clear visibility.

#### Faces

High distinction white metal with black fine-line markings for easy, doubt-free reading even over longer distances. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hands.

No second hands on DCF77 and AirPort24 radio controlled clocks and on minute pulse 12...60 V controlled slave clocks.

#### Double face clocks

Double face clocks come completely wired and pre-assembled.

Just mount them and plug in – that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!



Indoor analog double face

Type series 282



















## DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24 PEWETA DCFport24 sli

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

▼ Clock type	 250 x 250 mm Item No.	-	300 x 300 mr Item No.		400 x 400 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5	51. <b>282</b> .232 51. <b>282</b> .233		51. <b>282</b> .332 51. <b>282</b> .333		51. <b>282</b> .432 51. <b>282</b> .433	825 825
DCF77 radio controlled clock, mains operated 230	52. <b>282</b> .232 52. <b>282</b> .233		52. <b>282</b> .332 52. <b>282</b> .333		52. <b>282</b> .432 52. <b>282</b> .433	865 865
Slave clock, minute pulse 1260 V	 71. <b>282</b> .232 71. <b>282</b> .233		71. <b>282</b> .332 71. <b>282</b> .333		71. <b>282</b> .432 71. <b>282</b> .433	539 539
Slave clock, minute/second pulse 12/24 V	72. <b>282</b> .232 72. <b>282</b> .233		72. <b>282</b> .332 72. <b>282</b> .333		72. <b>282</b> .432 72. <b>282</b> .433	989 989
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>282</b> .232 74. <b>282</b> .233		74. <b>282</b> .332 74. <b>282</b> .333	•	74. <b>282</b> .432 74. <b>282</b> .433	1,359 1,359
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>282</b> .232 75. <b>282</b> .233		75. <b>282</b> .332 75. <b>282</b> .333		75. <b>282</b> .432 75. <b>282</b> .433	1,309 1,309
Telegram slave clock, DCFport24	81. <b>282</b> .232 81. <b>282</b> .233		81. <b>282</b> .332 81. <b>282</b> .333		81. <b>282</b> .432 81. <b>282</b> .433	585 585
RC telegram slave clock, <i>AirPort24</i> , battery operated 1.5 V <sup>1)</sup>	 84. <b>282</b> .232 84. <b>282</b> .233		84. <b>282</b> .332 84. <b>282</b> .333		84. <b>282</b> .432 84. <b>282</b> .433	805 805
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>282</b> .232 85. <b>282</b> .233		85. <b>282</b> .332 85. <b>282</b> .333		85. <b>282</b> .432 85. <b>282</b> .433	845 845
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>282</b> .232 91. <b>282</b> .233		91. <b>282</b> .332 91. <b>282</b> .333		91. <b>282</b> .432 91. <b>282</b> .433	755 755

Options	250x250 Suffix	mm Surcharge € each		mm Surcharge € each		00mm Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	45	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	45	-06	49
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Detachable ceiling mounting (length acc. to customer's choice)	-29	on request	-29	on request	-29	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Metal cover for wall or ceiling mounting brackets	-37	39	-37	39	-37	39
Stainless steel cover V2A for wall or ceiling mounting brackets	-38	95	-38	95	-38	95

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.





Large rooms with high ceilings and large halls require large clocks that can be read free of doubt from long distances.

Correct time at a single glance. You have our guarantee!



# **Clocks for Large Spaces**

## single face, indoor

Large spaces call for large clocks! Exact time, clearly readable.

#### Case

cir. 500 mm diameter very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

### Front glass

Domed shock-resistant Plexiglas® XT. As an option, low reflectivity front glass is available.

#### **Face**

High distinction white metal with large black Arabic numerals or large black DIN bar markings for easy, doubt-free reading even over longer distances.

Face printed according to DIN 41091.

#### Hands

Black bar-type hour and minute

Red second hand on slave clocks with minute/second pulse (72.xxx) and on slave clocks with synchronous second hands (74.xxx) only.



	Arabic num	erals	Bar marking	gs
Clock type	Item No.	€ each	Item No.	<b>€</b> each
DCF77 radio controlled clock, battery op. 2 x 1,5 V <sup>1) 2)</sup>	51. <b>330</b> .511	750	51. <b>330</b> .521	750
DCF77 radio controlled clock, mains operated 230 VAC, with outage reserve	52. <b>330</b> .511	790.–	52. <b>330</b> .521	790.–
Slave clock, minute pulse 1260 V	71. <b>330</b> .511	475	71. <b>330</b> .521	475
Slave clock, minute/second pulse 12/24 V	72. <b>330</b> .511	700	72. <b>330</b> .521	700
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>330</b> .511	885	74. <b>330</b> .521	885
Telegram slave clock, DCFport24, 24 V	81. <b>330</b> .511	559	81. <b>330</b> .521	559
RC telegram slave clock, AirPort24, battery op. 1.5 V <sup>1)</sup>	84. <b>330</b> .511	684	84. <b>330</b> .521	684
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>330</b> .511	724	85. <b>330</b> .521	724
NTP system clock (NTP client), synch. by LAN, PoE <sup>3)</sup>	91. <b>330</b> .511	789	91. <b>330</b> .521	789

Options	Suffix	Surcharge € each		Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	49	-05	49
Case enamelled in metallic dark gun metal DB 703	-06	49	-06	49
Case custom enamelled	-10	on request	-10	on request
Low reflectivity front glass	-50	on request	-50	on request

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
custom enamelled	-10



Large space analog single face

Type series 330





















DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

# PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP



<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>31</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces double face, indoor



Large space analog double face

332



























extremely sturdy version - solid, industrial grade metal cases with sturdy wall brackets or suspended from the ceiling, shockresistant Plexiglas® XT front glasses.

The best decision for a reliable and durable product!



Sandy.

△ Ceiling mount double bracket design, optionally available in custom length



71.**332**.522 shown

Tube version for suspension from the ceiling, tube optionally available in custom length





cir. 500 mm diameter, very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of double bracket wall or ceiling mounting, standard bracket length cir. 210 mm, or sturdy metal tube suspension from the ceiling, tube length cir. 500 mm.

Rim and mounting fixtures enamelled metallic dark gun metal (DB 703).

#### Front glasses

Domed shock-resistant Plexiglas® XT. As an option, low reflectivity front glasses are available.

#### Faces

High distinction white metal with large black Arabic numerals or large black DIN bar markings for easy, doubt-free reading even over longer distances. Faces printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands. Red second hands on slave clocks with minute/ second pulse (72.xxx) and on slave clocks with synchronous second hands (74.xxx) only.

#### Double face clocks

**Arabic numerals** 

Double face clocks come completely wired and pre-assembled. Just mount them and plug in - that's it!

Bar markings



Large space analog double face























clocks DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

Clock type	Item No.	€ each	Item No.	<b>€</b> each
DCF77 radio controlled clock, battery operated 2 x 1.5 V <sup>1) 2)</sup> wall	51. <b>332</b> .512	1,495	51. <b>332</b> .522	1,495
ceiling	51. <b>332</b> .513	1,495	51. <b>332</b> .523	1,495
tube	51. <b>332</b> .514	1,495	51. <b>332</b> .524	1,495
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup> wall	52. <b>332</b> .512	1,535	52. <b>332</b> .522	1,535
	52. <b>332</b> .513		52. <b>332</b> .523	
tube	52. <b>332</b> .514	1,535	52. <b>332</b> .524	1,535
	71. <b>332</b> .512		71. <b>332</b> .522	
	71. <b>332</b> .513		71. <b>332</b> .523	-
	71. <b>332</b> .514		71. <b>332</b> .524	•
	72. <b>332</b> .512		72. <b>332</b> .522	
	72. <b>332</b> .513	•	72. <b>332</b> .523	
	72. <b>332</b> .514	-	72. <b>332</b> .524	
	74. <b>332</b> .512	•	74. <b>332</b> .522	•
	74. <b>332</b> .513		74. <b>332</b> .523	
	74. <b>332</b> .514	-	74. <b>332</b> .524	
	81. <b>332</b> .512		81. <b>332</b> .522	
	81. <b>332</b> .513		81. <b>332</b> .523	-
	81. <b>332</b> .514		81. <b>332</b> .524	•
. , , , , , , , , , , , , , , , , , , ,	84. <b>332</b> .512	•	84. <b>332</b> .522	•
	84. <b>332</b> .513 84. <b>332</b> .514		84. <b>332</b> .523 84. <b>332</b> .524	-
	85. <b>332</b> .514		85. <b>332</b> .524	-
	85. <b>332</b> .512		85. <b>332</b> .522	
	85. <b>332</b> .514	-	85. <b>332</b> .524	-
	91. <b>332</b> .512		91.332.522	
	91. <b>332</b> .512		91. <b>332</b> .522	
	91. <b>332</b> .514		91.332.524	
		1,000		.,
		Surcharge		Surcharge
Options	Suffix	€ each		€ each
Case enamelled in metallic silver grey RAL 9006	-05	79.–	-05	79.–
Case enamelled in metallic dark gun metal DB 703	-06	79.–	-06	79.–
Case custom enamelled	-10	on request	-10	on request

		Juicharge		Juicharge
Options	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	79.–	-05	79.–
Case enamelled in metallic dark gun metal DB 703	-06	79.–	-06	79.–
Case custom enamelled	-10	on request	-10	on request
Case fitted with lugs for suspension by ropes or chains	-30	none	-30	none
Custom length mounting brackets	-31	on request	-31	on request
Low reflectivity front glasses	-51	on request	-51	on request

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10

<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces single face, indoor



Large space analog single face

























Large spaces call for large clocks! Extremely sturdy clocks with solid, industrial grade metal cases. Doubt-free reading of the exact time from afar – at any

Also available in a version resistant to thrown balls, according to DIN 18032, part 3.



71.**350**.511 shown

Case enamelled dark gun metal (DB703) as an option

Outdoor clocks resistant to thrown balls





- cir. 446 mm diameter
- cir. 546 mm diameter
- cir. 646 mm diameter

very sturdy metal case, enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for gymnasiums and other sporting facilities. Very sturdy case with three-point mounting as a safeguard, proof against wrenching off the hook. Front glass is a 2-layer laminated safety glass, 6 mm thick. The clocks are certified and labelled

Slave clock, minute pulse 12...60 V

Slave clock, minute pulse 12/24 V,

with outage reserve

Case custom enamelled

cir. 4 years).

Slave clock, minute/second pulse 12/24 V

synchronous second hand 230 VAC/50 Hz

Telegram slave clock, DCFport24, 24 V

DCF77 radio controlled clock, battery operated 2 x 1.5 V<sup>1) 2)</sup>

RC telegram slave clock, AirPort24, battery operated 2 x 1,5 V1)

RC telegram slave clock, AirPort24, mains operated 230 VAC,

NTP system clock (NTP client), synchronisation by LAN, PoE<sup>3)</sup>

Case enamelled in metallic dark gun metal DB 703

Resistance to thrown balls acc. to DIN 18032, part 3

These clocks are available optionally with customised

and add the appropriate suffix(es) to the Item No.

features at the surcharges as listed. Just pick your option(s)

Packaging against dust and spray (IP 54)

Options - just as you like them ...

DCF77 radio controlled clock, mains operated 230 VAC<sup>2)</sup>

"resistant to thrown balls according to DIN 18032, part 3".

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

#### Packaging (option)

Face diameter ▶

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

High distinction white metal with large black Arabic numerals for easy, doubt-free reading even over longer distances. Visible face diameter 420 mm, 520 mm and 620 mm respectively. Face printed according to DIN 41091.

420 mm

Item No.

51.**350**.411

52.**350**.411

71.350.411

72.**350**.411

74.350.411

81.350.411

84.350.411

85.350.411

91.350.411

420 mm

Suffix

-06

-10

-54

-59

#### Hands

520 mm

Item No

52.**350**.511

71.**350**.511

72.**350**.511

74.**350**.511

81.**350**.511

84.**350**.511

85.**350**.511

**819.-** 91.**350**.511

Suffix

Case colour

Surcharge 520 mm

none -06

80.- -54

179.- -59

**830.-** 51.**350**.511

€ each

870.-

499.-

724.-

909.-

589.-

714.-

754.-

€ each

on request -10

Pointed black bar-type hour and minute hands according to DIN 41092.

Red second hand on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

620 mm

Item No

52.**350**.611

71.**350**.611

72.**350**.611

74.**350**.611

81.**350**.611

84.**350**.611

85.**350**.611

91.350.611

Suffix

**949.-** 51.**350**.611

€ each

989.-

619.-

844.-

709.-

834.-

874.-

939.-

€ each

on request -10

dark gun metal DB 703

? custom enamelled

Surcharge 620 mm

none -06

80.- -54

179.- -59

1.029.-



Large space analog single face

















€ each

1,125.-

1,165.-

734.-

959.-

824.-

949.-

989.-

1.054.-

€ each

none

80.-

179.-

Suffix

-06

-10

Surcharge

on request

1.144.-







clocks DCF77 radio controlled clocks of this type series will be sup plied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km

## east of Frankfurt/M.). PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

1) Alkaline hatteries are included in delivery shipment (medium lifesnan	

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.



<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

Outdoor clocks resistant to thrown balls



# **Clocks for Large Spaces**

single face, indoor



Large space analog single face



































Large spaces call for large clocks! Extremely sturdy clocks with solid, industrial grade metal cases. Doubt-free reading of the exact time from afar - at any

Also available in a version resistant to thrown balls, according to DIN 18032, part 3.



Case enamelled dark gun metal (DB703) as an option

**Outdoor clocks** resistant to thrown balls





- cir. 446 mm diameter
- cir. 546 mm diameter
- cir. 646 mm diameter

very sturdy metal case, enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for gymnasiums and other sporting facilities. Very sturdy case with three-point mounting as a safeguard, proof against wrenching off the hook. Front glass is a 2-layer laminated safety glass, 6 mm thick. The clocks are certified and labelled

Slave clock, minute pulse 12...60 V

Slave clock, minute pulse 12/24 V,

with outage reserve

Case custom enamelled

cir. 4 years).

Slave clock, minute/second pulse 12/24 V

synchronous second hand 230 VAC/50 Hz

Telegram slave clock, DCFport24, 24 V

DCF77 radio controlled clock, battery operated 2 x 1.5 V<sup>1) 2)</sup>

RC telegram slave clock, AirPort24, battery operated 2 x 1,5 V1)

RC telegram slave clock, AirPort24, mains operated 230 VAC,

NTP system clock (NTP client), synchronisation by LAN, PoE<sup>3)</sup>

Case enamelled in metallic dark gun metal DB 703

Resistance to thrown balls acc. to DIN 18032, part 3

These clocks are available optionally with customised

and add the appropriate suffix(es) to the Item No.

features at the surcharges as listed. Just pick your option(s)

Packaging against dust and spray (IP 54)

Options - just as you like them ...

DCF77 radio controlled clock, mains operated 230 VAC<sup>2)</sup>

"resistant to thrown balls according to DIN 18032, part 3".

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

#### Packaging (option)

Face diameter ▶

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

High distinction white metal with large black DIN bar markings for easy, doubtfree reading even over longer distances. Visible face diameter 420 mm, 520 mm and 620 mm respectively. Face printed according to DIN 41 091.

420 mm

Item No.

51.**350**.421

52.**350**.421

71.350.421

72.**350**.421

74.**350**.421

81.350.421

84.350.421

85.350.421

91.350.421

420 mm

Suffix

-06

-10

-54

-59

#### Hands

520 mm

Item No

52.**350**.521

71.**350**.521

72.350.521

74.**350**.521

81.**350**.521

84.**350**.521

85.**350**.521

**819.-** 91.**350**.521

Suffix

Case colour

Surcharge 520 mm

none -06

80.- -54

179.- -59

**830.-** 51.**350**.521

€ each

870.-

499.-

724.-

909.-

589.-

714.-

754.-

€ each

on request -10

Pointed black bar-type hour and minute hands according to DIN 41092.

Red second hand on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

620 mm

Item No

52.**350**.621

71.**350**.621

72.**350**.621

74.**350**.621

81.**350**.621

84.**350**.621

85.350.621

91.350.621

Suffix

**949.-** 51.**350**.621

€ each

989.-

619.-

844.-

709.-

834.-

874.-

939.-

€ each

on request -10

dark gun metal DB 703

? custom enamelled

Surcharge 620 mm

none -06

80.- -54

179.- -59

1.029.-



Large space analog single face



€ each

1,125.-

1,165.-

734.-

959.-

824.-

949.-

989.-

1.054.-

€ each

none

80.-

179.-

Suffix

-06

-10

Surcharge

on request

1.144.-





















clocks DCF77 radio controlled clocks of this type series will be sup plied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: <sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

Outdoor clocks resistant to thrown balls



# Clocks for Large Spaces double face, indoor



Large space analog double face























Large spaces call for large clocks! Extremely sturdy clocks with solid, industrial grade metal cases. Doubt-free reading of the exact time from afar - at any time.



Ceiling mount double bracket design and case enamelled in metallic dark gun metal (DB703) as an option



Tube version for suspension from the ceiling





- cir. 446 mm diameter
- cir. 546 mm diameter
- cir. 646 mm diameter

very sturdy metal case, enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of double bracket wall or ceiling mounting, standard bracket length cir. 210 mm, or sturdy metal tube suspension from the ceiling, tube length cir. 1000 mm. On request, custom length available optionally. As an option, available with luns for suspe

#### Front glasses

Flat shock-resistant Plexiglas® XT (PMMA).

### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### **Faces**

High distinction white metal with large black Arabic numerals for easy, doubtfree reading even over longer distances. Visible face diameter 420 mm, 520 mm and 620 mm respectively. Faces printed according to DIN 41 091.

#### Hands

Pointed black bar-type hour and minute hands according to DIN 41092

Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only



Large space analog double face

#### cks

cks come completely wired and pre-assembled. Just mount them and plug in - that's it!

















clocks







DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

Toption, available with rags for	Double face cloc
ension by ropes or chains.	Double face clock

Face dia	meter >	420 mm Item No.	€ each	520 mm Item No.	€ each	620 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 2 x 1.5 V <sup>(1) 2)</sup>	ceiling	51. <b>352</b> .412 51. <b>352</b> .413 51. <b>352</b> .414	1,544	51. <b>352</b> .512 51. <b>352</b> .513 51. <b>352</b> .514	1,695	51. <b>352</b> .612 51. <b>352</b> .613 51. <b>352</b> .614	1,899 1,899 1,999
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	ceiling	52. <b>352</b> .412 52. <b>352</b> .413 52. <b>352</b> .414	1,584	52. <b>352</b> .512 52. <b>352</b> .513 52. <b>352</b> .514	1,735	52. <b>352</b> .612 52. <b>352</b> .613 52. <b>352</b> .614	1,939 1,939 2,039
Slave clock, minute pulse 1260 V	ceiling	71. <b>352</b> .412 71. <b>352</b> .413 71. <b>352</b> .414	1,195	71. <b>352</b> .512 71. <b>352</b> .513 71. <b>352</b> .514	1,345	71. <b>352</b> .612 71. <b>352</b> .613 71. <b>352</b> .614	1,545 1,545 1,645
Slave clock, minute/second pulse 12/24 V	ceiling	72. <b>352</b> .412 72. <b>352</b> .413 72. <b>352</b> .414	1,645	72. <b>352</b> .512 72. <b>352</b> .513 72. <b>352</b> .514	1,795	72. <b>352</b> .612 72. <b>352</b> .613 72. <b>352</b> .614	1,995 1,995 2,095
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	ceiling	74. <b>352</b> .412 74. <b>352</b> .413 74. <b>352</b> .414	2,015	74. <b>352</b> .512 74. <b>352</b> .513 74. <b>352</b> .514	2,165	74. <b>352</b> .612 74. <b>352</b> .613 74. <b>352</b> .614	2,365 2,365 2,465
Telegram slave clock, <i>DCFport24</i> , 24 V	ceiling	81. <b>352</b> .412 81. <b>352</b> .413 81. <b>352</b> .414	1,309	81. <b>352</b> .512 81. <b>352</b> .513 81. <b>352</b> .514	1,459	81. <b>352</b> .612 81. <b>352</b> .613 81. <b>352</b> .614	1,660 1,660 1,760
RC telegram slave clock, AirPort24, battery operated 2 x 1,5 V <sup>1)</sup>	ceiling	84. <b>352</b> .412 84. <b>352</b> .413 84. <b>352</b> .414	1,459	84. <b>352</b> .512 84. <b>352</b> .513 84. <b>352</b> .514	1,609	84. <b>352</b> .612 84. <b>352</b> .613 84. <b>352</b> .614	1,810 1,810 1,910
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	ceiling	85. <b>352</b> .412 85. <b>352</b> .413 85. <b>352</b> .414	1,499	85. <b>352</b> .512 85. <b>352</b> .513 85. <b>352</b> .514	1,649	85. <b>352</b> .612 85. <b>352</b> .613 85. <b>352</b> .614	1,850 1,850 1,950
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	ceiling	91. <b>352</b> .412 91. <b>352</b> .413 91. <b>352</b> .414	1,539	91. <b>352</b> .512 91. <b>352</b> .513 91. <b>352</b> .514	1,689	91. <b>352</b> .612 91. <b>352</b> .613 91. <b>352</b> .614	1,890 1,890 1,990

	420 mm	Surcharge	520 mm	Surcharge	620 mm	Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic dark gun metal DB 703	-06	none	-06	none	-06	none
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case with lugs for suspension by ropes or chains	-30	none	-30	none	-30	none
Custom length mounting fixture	-31	on request	-31	on request	-31	on request
Packaging against dust and spray (IP 54)	-54	150 -	-54	150 -	-54	150 -

<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>31</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces double face, indoor



Large space analog double face























Large spaces call for large clocks! Extremely sturdy clocks with solid, industrial grade metal cases. Doubt-free reading of the exact time from afar – at any time.



Ceiling mount double bracket design and case enamelled in metallic dark gun metal (DB703) as an option



Tube version for suspension from the ceiling





- cir. 446 mm diameter
- cir. 546 mm diameter
- cir. 646 mm diameter

very sturdy metal case, enamelled metallic silver grey (RAL 9006) or, as an option, enamelled in dark gun metal (DB 703) or custom enamelled, as listed below.

Protection grade IP 40 (EN 60529).

#### Mounting

Choice of double bracket wall or ceiling mounting, standard bracket length cir. 210 mm, or sturdy metal tube suspension from the ceiling, tube length cir. 1000 mm. On request, custom length available optionally. As an option, available with lugs for suspension by ropes or chains.

#### Front glasses

Flat shock-resistant Plexiglas® XT (PMMA).

## Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### **Faces**

High distinction white metal with large black DIN bar markings for easy, doubtfree reading even over longer distances. Visible face diameter 420 mm, 520 mm and 620 mm respectively. Faces printed according to DIN 41 091.

Face diameter ► 420 mm

#### Hands

Pointed black bar-type hour and minute hands according to DIN 41092

Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.



Large space analog double face

#### Double face clocks

Double face clocks come completely wired and pre-assembled. Just mount them and plug in - that's it!

**1.689.-** 91.**352**.623

91.352.624

1.789.-

620 mm

















clocks







DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

1.890.-

1.990.-

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Clock type		Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, battery operated 2 x 1.5 V <sup>11 2)</sup>	ceiling	51. <b>352</b> .422 51. <b>352</b> .423 51. <b>352</b> .424	1,544	51. <b>352</b> .522 51. <b>352</b> .523 51. <b>352</b> .524	1,695	51. <b>352</b> .622 51. <b>352</b> .623 51. <b>352</b> .624	1,899 1,899 1,999
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	ceiling	52. <b>352</b> .422 52. <b>352</b> .423 52. <b>352</b> .424	-	52. <b>352</b> .522 52. <b>352</b> .523 52. <b>352</b> .524	1,735	52. <b>352</b> .622 52. <b>352</b> .623 52. <b>352</b> .624	1,939 1,939 2,039
Slave clock, minute pulse 1260 V	ceiling	71. <b>352</b> .422 71. <b>352</b> .423 71. <b>352</b> .424	1,195	71. <b>352</b> .522 71. <b>352</b> .523 71. <b>352</b> .524	1,345	71. <b>352</b> .622 71. <b>352</b> .623 71. <b>352</b> .624	1,545 1,545 1,645
Slave clock, minute/second pulse 12/24 V	ceiling	72. <b>352</b> .422 72. <b>352</b> .423 72. <b>352</b> .424	1,645	72. <b>352</b> .522 72. <b>352</b> .523 72. <b>352</b> .524	1,795	72. <b>352</b> .622 72. <b>352</b> .623 72. <b>352</b> .624	1,995 1,995 2,095
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	ceiling	74. <b>352</b> .422 74. <b>352</b> .423 74. <b>352</b> .424	-	74. <b>352</b> .522 74. <b>352</b> .523 74. <b>352</b> .524	2,165	74. <b>352</b> .622 74. <b>352</b> .623 74. <b>352</b> .624	2,365 2,365 2,465
Telegram slave clock, <i>DCFport24</i> , 24 V	ceiling	81. <b>352</b> .422 81. <b>352</b> .423 81. <b>352</b> .424	1,309	81. <b>352</b> .522 81. <b>352</b> .523 81. <b>352</b> .524	1,459	81. <b>352</b> .622 81. <b>352</b> .623 81. <b>352</b> .624	1,660 1,660 1,760
RC telegram slave clock, <i>AirPort24</i> , battery operated 2 x 1,5 V <sup>1)</sup>	ceiling	84. <b>352</b> .422 84. <b>352</b> .423 84. <b>352</b> .424	1,459	84. <b>352</b> .522 84. <b>352</b> .523 84. <b>352</b> .524	1,609	84. <b>352</b> .622 84. <b>352</b> .623 84. <b>352</b> .624	1,810 1,810 1,910
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	ceiling	85. <b>352</b> .422 85. <b>352</b> .423 85. <b>352</b> .424	1,499	85. <b>352</b> .522 85. <b>352</b> .523 85. <b>352</b> .524	1,649	85. <b>352</b> .622 85. <b>352</b> .623 85. <b>352</b> .624	1,850 1,850 1,950
NTP system clock (NTP client),	wall	91. <b>352</b> .422	1,539	91. <b>352</b> .522	1,689	91.352.622	1,890

Options	420 mm Suffix	Surcharge € each		Surcharge € each		Surcharge € each
Case enamelled in metallic dark gun metal DB 703	-06	none	-06	none	-06	none
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case with lugs for suspension by ropes or chains	-30	none	-30	none	-30	none
Custom length mounting fixture	-31	on request	-31	on request	-31	on request
Packaging against dust and spray (IP 54)	-54	150 -	-54	150 -	-54	150 -

All prices are subject to change without notice, packing and shipping cost (see page 185) as well as VAT for deliveries within Germany added.

ceiling 91.**352**.423

tube 91.**352**.424

**1,539.-** 91.**352**.523

**1,639.-** 91.**352**.524

synchronisation by LAN, PoE3

<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>31</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces flush-mounted in walls, indoor



Large space analog flush-mounted























Clocks of this type series are excellently suited for all applications requiring large clocks with solid, industrial grade metal cases mounted flush with a wall

Also available in a version resistant to thrown balls, according to DIN 18032, part 3.



Clock cases made of stainless steel V4A, blasted and varnished (optional) are resistant to saline or chlorous media. Excellently suited for permanent use in public swimming pools.



- Faceplate cir. 460 x 460 mm
- Faceplate cir. 560 x 560 mm
- Faceplate cir. 660 x 660 mm very sturdy metal case for flush mounting in walls, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below. A stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), blasted and additionally coated with a protective varnish, is available as an option. Protection grade IP 40 (EN 60529).

#### Mounting

These clocks are to be mounted flush with the wall surface and require a recess of (WxHxD)

- cir. 406 x 406 x 80 mm
- cir. 506 x 506 x 80 mm
- cir. 606 x 606 x 80 mm.

#### Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for schools, gymnasiums and other sporting facilities. Very sturdy metal case with 6 mm two-ply laminated mineral safety glass. These clocks conform to German Industry Standard and are certified and labelled "resistant to thrown balls according to DIN 18032, part 3".

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

High distinction white metal with large black Arabic numerals for easy, doubt-free reading even over longer distances. Visible print diameters are cir. 335 mm, 420 mm, and 503 mm respectively. Face printed according to DIN 41 091.

#### Hands:

Black bar-type hour and minute hands. Red second hand on minute/second pulse slave clocks (72.xxx) only.

Stainless steel V4A + varnish (option)

V4A quality stainless steel with an addi-

tional coat of protective varnish is out-

standingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.



Large space analog flush-mounted























clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Front glass

### Packaging (option)

Face dimensions ► Clock type	400 x 400 mm Item No.	€ each	500 x 500 mm Item No.	€ each	600 x 600 mm Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	52. <b>369</b> .410	959	52. <b>369</b> .510	1,079	52. <b>369</b> .610	1,209
Slave clock, minute pulse 1260 V	71. <b>369</b> .410	589	71. <b>369</b> .510	709	71. <b>369</b> .610	839
Slave clock, minute/second pulse 12/24 V	72. <b>369</b> .410	814	72. <b>369</b> .510	934	72. <b>369</b> .610	1,064
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>369</b> .410	999.–	74. <b>369</b> .510	1,119.–	74. <b>369</b> .610	1,249
Telegram slave clock, DCFport24, 24 V	81. <b>369</b> .410	610	81. <b>369</b> .510	799.–	81. <b>369</b> .610	929
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>369</b> .410	844	85. <b>369</b> .510	964	85. <b>369</b> .610	1,094
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	91. <b>369</b> .410	759.–	91. <b>369</b> .510	1,029	91. <b>369</b> .610	1,159

Options	400 x 400 Suffix	mm Surcharge € each		Surcharge € each		Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	49	-05	59
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	49	-06	59
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V4A, blasted and varnished	-22	on request	-22	on request	-22	on request
Custom logo on clock face	-47	on request	-47	on request	-47	on request
Packaging against dust and spray (IP 54)	-54	80	-54	80	-54	80
Resistance to thrown balls acc. to DIN 18032, part 3	-59	179	-59	179	-59	179

## Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V4A + clear varnish	-22

<sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces flush-mounted in walls, indoor



Large space analog flush-mounted

























Clocks of this type series are excellently suited for all applications requiring large clocks with solid, industrial grade metal cases mounted flush with a wall surface.

Also available in a version resistant to thrown balls, according to DIN 18032, part 3.



Case enamelled in metallic silver grey (RAL 9006) available as an option



- Faceplate cir. 460 x 460 mm
- Faceplate cir. 560 x 560 mm
- Faceplate cir. 660 x 660 mm very sturdy metal case for flush mounting in walls, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below. A stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), blasted and additionally coated with a protective varnish, is available as an option. Protection grade IP 40 (EN 60529).

#### Mounting

These clocks are to be mounted flush with the wall surface and require a recess of (WxHxD)

- cir. 406 x 406 x 80 mm
- cir. 506 x 506 x 80 mm
- cir. 606 x 606 x 80 mm.

#### Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for schools, gymnasiums and other sporting facilities. Very sturdy metal case with 6 mm two-ply laminated mineral safety glass. These clocks conform to German Industry Standard and are certified and labelled "resistant to thrown balls accord-

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

High distinction white metal with large black DIN bar markings for easy, doubtfree reading even over longer distances. Visible print diameters are cir. 335 mm, 420 mm, and 503 mm respectively. Face printed according to DIN 41091.

Pointed black bar-type hour and minute hands according to DIN 41092.

Red second hand on minute/second pulse slave clocks (72.xxx) only.

Stainless steel V4A + varnish (option)

V4A quality stainless steel with an addi-

tional coat of protective varnish is out-

standingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.



Large space analog flush-mounted





















#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

ing to DIN 18032, part 3".

Face dimensions	400 x 400 mm		500 x 500 mm		600 x 600 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	52. <b>369</b> .420	959	52. <b>369</b> .520	1,079	52. <b>369</b> .620	1,209
Slave clock, minute pulse 1260 V	71. <b>369</b> .420	589	71. <b>369</b> .520	709	71. <b>369</b> .620	839
Slave clock, minute/second pulse 12/24 V	72. <b>369</b> .420	814	72. <b>369</b> .520	934	72. <b>369</b> .620	1,064
Slave clock, minute pulse 12/24 V, synchronous second hand 230 V AC/50 Hz	74. <b>369</b> .420	999.–	74. <b>369</b> .520	1,119.–	74. <b>369</b> .620	1,249
Telegram slave clock, DCFport24, 24 V	81. <b>369</b> .420	610	81. <b>369</b> .520	799.–	81. <b>369</b> .620	929
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>369</b> .420	844.–	85. <b>369</b> .520	964.–	85. <b>369</b> .620	1,094.–
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	91. <b>369</b> .420	759	91. <b>369</b> .520	1,029	91. <b>369</b> .620	1,159

	400 x 400 mm	Surcharge	500 x 500 mm	Surcharge	600x600mm	Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	49	-05	59
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	49	-06	59
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V4A, blasted and varnished	-22	on request	-22	on request	-22	on request
Custom logo on clock face	-47	on request	-47	on request	-47	on request
Packaging against dust and spray (IP 54)	-54	80	-54	80	-54	80
Resistance to thrown balls acc. to DIN 18032, part 3	-59	179	-59	179	-59	179

### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V4A + clear varnish	-22

<sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces on-wall mounting, indoor



Large space analog single face























Clocks of this type series are excellently suited for all applications requiring large clocks with solid, industrial grade metal cases combined with a doubt-free readability.

They are also available "resistant to thrown balls" according to DIN 18032, part 3.



Clock cases made of stainless steel V4A, blasted and varnished (optional) are resistant to saline or chlorous media. Excellently suited for permanent use in public swimming pools.



- cir. 400 x 400 mm
- cir. 500 x 500 mm
- cir. 600 x 600 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, custom enamelled, as listed below. A stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) with a matted finish or a stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), blasted and additionally coated with a protective varnish, are available as options. Protection grade IP 40 (EN 60529).

Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for schools, gymnasiums and other sporting facilities. Very sturdy metal case with 6 mm two-ply laminated mineral safety glass. These clocks conform to German Industry Standard and are certified and

RC telegram slave clock, AirPort24, battery operated 2 x 1,5 V<sup>1)</sup>

labelled "resistant to thrown balls according to DIN 18032, part 3".

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

High distinction white metal with large black Arabic numerals for easy, doubt-free reading even over longer distances. Visible print diameters are 335 mm, 420 mm, and 503 mm respectively. Face printed according to DIN 41091.

#### Hands

Black bar-type hour and minute hands. Red second hand on slave clocks with minute/ second pulse (72.xxx) and on slave clocks with synchronous second hands (74.xxx) only.

### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!

Stainless steel V4A + varnish (option)

V4A quality stainless steel with an additional coat of protective varnish is outstandingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.

**794.-** 84.**370**.611



Large space analog single face

















clocks

924.-

179.-

fitted as standard







DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

77

Face dimensions	400 x 400 mm		500 x 500 mm		600 x 600 mm	
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, battery operated 2 x 1.5 V <sup>1)2)</sup>	51. <b>370</b> .411	489	51. <b>370</b> .511	909	51. <b>370</b> .611	1,039
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	52. <b>370</b> .411	569	52. <b>370</b> .511	949	52. <b>370</b> .611	1,079
Slave clock, minute pulse 1260 V	71. <b>370</b> .411	459	71. <b>370</b> .511	579	71. <b>370</b> .611	709
Slave clock, minute/second pulse 12/24 V	72. <b>370</b> .411	684	72. <b>370</b> .511	804	72. <b>370</b> .611	934
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>370</b> .411	869	74 <b>.370</b> .511	989.–	74. <b>370</b> .611	1,119.–
Telegram slave clock, DCFport24, 24 V	81. <b>370</b> .411	480	81. <b>370</b> .511	669	81. <b>370</b> .611	799

84.370.411

**584.-** 84.**370**.511

179.--59

169.-

RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>370</b> .411	644	85. <b>370</b> .511	834	85. <b>370</b> .611	964
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	91. <b>370</b> .411	629	91. <b>370</b> .511	899	91. <b>370</b> .611	1,029
	400 x 400 mm	Surcharge	500 x 500 mm	Surcharge	600 x 600 mr	n Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	49	-05	59
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	49	-06	59
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Case stainless steel V4A, blasted and varnished	-22	on request	-22	on request	-22	on request
Custom logo on clock face	-47	on request	-47	on request	-47	on request
Packaging against dust and spray (IP 54)	-54	80	-54	80	-54	80

-59

-60

### Options - just as you like them ...

Resistance to thrown balls acc. to DIN 18032, part 3

External DCF77 receiving aerial (cannot be added later)

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20
stainless steel V4A + clear varnish	-22

179.--59

fitted as standard

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment. (Exception: 51.370.421, 52.370.421)

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces on-wall mounting, indoor



Large space analog single face

























Clocks of this type series are excellently suited for all applications requiring large clocks with solid, industrial grade metal cases combined with a doubt-free readability.

They are also available "resistant to thrown balls" according to DIN 18032, part 3.



Case enamelled dark gun metal (DB703) available as an option



- cir. 400 x 400 mm
- cir. 500 x 500 mm
- cir. 600 x 600 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, custom enamelled, as listed below. A stainless steel case (1.4301 X5CrNi 18–10, German trade name V2A) with a matted finish or a stainless steel case (1.4571 X6CrNiMoTi 17–12–2, German trade name V4A), blasted and additionally coated with a protective varnish, are available as options. Protection grade IP 40 (EN 60 529).

Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for schools, gymnasiums and other sporting facilities. Very sturdy metal case with 6 mm two-ply laminated mineral safety glass. These clocks conform to German Industry Standard and are certified and

labelled "resistant to thrown balls according to DIN 18032, part 3".

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Face

High distinction white metal with large black DIN bar markings for easy, doubtfree reading even over longer distances. Visible print diameters are 335 mm, 420 mm, and 503 mm respectively. Face printed according to DIN 41091.

#### Hands

Pointed black bar-type hour and minute hands according to DIN 41 092.

Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!

Stainless steel V4A + varnish (option) V4A quality stainless steel with an additional coat of protective varnish is outstandingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as

well as for the chemical industry.



Large space analog single face

Type series















clocks

1,029.-







DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Face dimensions ► Clock type		€ each	500 x 500 mm Item No.	€ each	600 x 600 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 2 x 1.5 V <sup>1) 2)</sup>	51. <b>370</b> .421	489	51. <b>370</b> .521	909	51. <b>370</b> .621	1,039
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	52. <b>370</b> .421	569	52. <b>370</b> .521	949	52. <b>370</b> .621	1,079
Slave clock, minute pulse 1260 V	71. <b>370</b> .421	459	71. <b>370</b> .521	579	71. <b>370</b> .621	709
Slave clock, minute/second pulse 12/24 V	72. <b>370</b> .421	684	72. <b>370</b> .521	804	72. <b>370</b> .621	934
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74 <b>.370</b> .421	869	74. <b>370</b> .521	989	74. <b>370</b> .621	1,119.–
Telegram slave clock, DCFport24, 24 V	81. <b>370</b> .421	480	81. <b>370</b> .521	669	81. <b>370</b> .621	799
RC telegram slave clock, AirPort24, battery operated 2 x 1,5 V <sup>1)</sup>	84. <b>370</b> .421	584	84. <b>370</b> .521	794	84. <b>370</b> .621	924
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>370</b> .421	644	85. <b>370</b> .521	834	85. <b>370</b> .621	964

91.370.421

**629.-** 91.**370**.521

						00 mm Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	39	-05	49	-05	59
Case enamelled in metallic dark gun metal DB 703	-06	39	-06	49	-06	59.–
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Case stainless steel V4A, blasted and varnished	-22	on request	-22	on request	-22	on request
Custom logo on clock face	-47	on request	-47	on request	-47	on request
Packaging against dust and spray (IP 54)	-54	80	-54	80	-54	80
Resistance to thrown balls acc. to DIN 18032, part 3	-59	179	-59	179.–	-59	179.–
External DCF77 receiving aerial (cannot be added later)	-60	169	fitted	d as standard	1	fitted as standard

### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

NTP system clock (NTP client), synchronisation by LAN, PoE<sup>2)</sup>

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V2A	-20
stainless steel V4A + clear varnish	-22

**899.-** 91.**370**.621

**79** 

<sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup>A remotable DCF77 receiving aerial is included in delivery shipment. (Exception: 51.370.421, 52.370.421)

<sup>&</sup>lt;sup>31</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces double face, indoor



Large space analog double face























Double face indoor clocks with solid, industrial grade metal cases with sturdy wall brackets or suspended from the ceiling, shock-resistant Plexiglas® XT front glasses.

The best decision for a reliable and durable product!



Clock cases made of stainless steel V4A, blasted and varnished (optional) are resistant to saline or chlorous media. Excellently suited for permanent use in public swimming pools.



- cir. 400 x 400 mm
- cir. 500 x 500 mm
- cir. 600 x 600 mm

very sturdy metal case enamelled white (RAL 9016). Optionally, at a surcharge, custom enamelled, as listed below. A stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A) with a matted finish or a stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), blasted and additionally coated with a protective varnish, are available as options. Protection grade IP 40 (EN 60529).

#### Mounting

Choice of double bracket wall or ceiling mounting, enamelled white, standard bracket length cir. 250 mm. Also available with lugs for suspension by ropes or chains as an option for larger ceiling heights.

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA).

#### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### **Faces**

High distinction white metal with large black Arabic numerals for easy, doubt-free reading even over longer distances. Visible print diameters are 335 mm, 420 mm, and 503 mm respectively. Faces printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands. Red second hand on slave clocks with minute/ second pulse (72.xxx) and on slave clocks with synchronous second hands (74.xxx) only.

Face dimensions ► 400 x 400 mm

#### Double face clocks

500 x 500 mm

-10

-20

95.--06

on request -22

on request -30

on request -47

150.- -54

on request

on request

Double face clocks come completely wired and pre-assembled. Just mount them and plug in - that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!

## Stainless steel V4A + varnish (option)

V4A quality stainless steel with an additional coat of protective varnish is outstandingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.

-06

-10

-20

-22

-30

105.-

on request

on request

on request

on request

on request -47

150.- -54

600 x 600 mm



Large space analog double face

Type series





















clocks DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km

#### east of Frankfurt/M.). PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

125.-

on request

on request

on request

on request

on request

150.-

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Clock type	Mounting ▼	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, battery operate		51. <b>372</b> .412	•	51. <b>372</b> .512	•	51. <b>372</b> .612	2,079
	ceiling	51. <b>372</b> .413	1,624	51. <b>372</b> .513	1,855	51. <b>372</b> .613	2,079
DCF77 radio controlled clock, mains operated 2		52. <b>372</b> .412	•	52. <b>372</b> .512	•	52. <b>372</b> .612	2,119
	ceiling	52. <b>372</b> .413	1,664	52. <b>372</b> .513	1,895	52. <b>372</b> .613	2,119
Slave clock, minute pulse 1260 V	wall	71. <b>372</b> .412	1,275	71. <b>372</b> .512	1,505	71. <b>372</b> .612	1,725
	ceiling	71. <b>372</b> .413	1,275	71. <b>372</b> .513	1,505	71. <b>372</b> .613	1,725
Slave clock, minute/second pulse 12/24 V	wall	72. <b>372</b> .412	1,725	72. <b>372</b> .512	1,955	72. <b>372</b> .612	2,175
	ceiling	72. <b>372</b> .413	1,725	72. <b>372</b> .513	1,955	72. <b>372</b> .613	2,175
Slave clock, minute pulse 12/24 V,		74. <b>372</b> .412	2,095	74. <b>372</b> .512	2,325	74. <b>372</b> .612	2,545
synchronous second hand 230 VAC/50 Hz	ceiling	74. <b>372</b> .413	2,095	74. <b>372</b> .513	2,325	74. <b>372</b> .613	2,545
Telegram slave clock, DCFport24, 24 V	wall	81. <b>372</b> .412	1,389	81. <b>372</b> .512	1,619	81. <b>372</b> .612	1,840
	ceiling	81. <b>372</b> .413	1,389	81. <b>372</b> .513	1,619	81. <b>372</b> .613	1,840
RC telegram slave clock, AirPort24,	wall	84. <b>372</b> .412	1,539	84. <b>372</b> .512	1,769	84. <b>372</b> .612	1,990
battery operated 2 x 1,5 V <sup>1)</sup>	ceiling	84. <b>372</b> .413	1,539	84. <b>372</b> .513	1,769	84. <b>372</b> .613	1,990
RC telegram slave clock, AirPort24,	wall	85. <b>372</b> .412	1,579	85. <b>372</b> .512	1,809	85. <b>372</b> .612	2,030
mains operated 230 VAC, with outage reserve	e ceiling	85. <b>372</b> .413	1,579.–	85. <b>372</b> .513	1,809	85. <b>372</b> .613	2,030
NTP system clock (NTP client),	wall	91. <b>372</b> .412	1,619	91. <b>372</b> .512	1,849	91. <b>372</b> .612	2,070
synchronisation by LAN, PoE <sup>3)</sup>	ceiling	91. <b>372</b> .413	1,619	91. <b>372</b> .513	1,849	91. <b>372</b> .613	2,070
		400x400mm	Surcharge	500x500mm 9	Surcharge	600x600mm	Surcharge
Options		Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 90	06	-05	95	-05	105	-05	125

-06

-10

-20

-22

-30

-47

-54

Case stainless steel V4A, blasted and varnished

Case with lugs for suspension by ropes or chains

Case stainless steel V2A, matted finish

Packaging against dust and spray (IP 54)

Case custom enamelled

Custom logo on clock face

Case enamelled in metallic dark gun metal DB 703

<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces double face, indoor



Large space analog double face



























Double face indoor clocks with solid, industrial grade metal cases with sturdy wall brackets or suspended from the ceiling, shock-resistant Plexiglas® XT front glasses.

The best decision for a reliable and durable product!



Case enamelled dark gun metal (DB703) as an option



- cir. 400 x 400 mm
- cir. 500 x 500 mm
- cir. 600 x 600 mm

very sturdy metal case enamelled white (RAL 9016). Optionally, at a surcharge, custom enamelled, as listed below. A stainless steel case (1.4301 X5CrNi 18–10, German trade name V2A) with a matted finish or a stainless steel case (1.4571 X6CrNiMoTi 17–12–2, German trade name V4A), blasted and additionally coated with a protective varnish, are available as options. Protection grade IP 40 (EN 60 529).

#### Mounting

Choice of double bracket wall or ceiling mounting, enamelled white, standard bracket length cir. 250 mm. Also available with lugs for suspension by ropes or chains as an option for larger ceiling heights.

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA).

### Packaging (option)

As an option, clockwork packaged to protect it against blown dust and/or sprayed water (IP 54 according to EN 60 529) is available.

#### Faces

High distinction white metal with large black DIN bar markings for easy, doubtfree reading even over longer distances. Visible print diameters are 335 mm, 420 mm, and 503 mm respectively. Faces printed according to DIN 41 091.

#### Hands

Face dimensions

Pointed black bar-type hour and minute hands according to DIN 41 092.

Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

#### Double face clocks

500 x 500 mm

Double face clocks come completely wired and pre-assembled.

Just mount them and plug in – that's it!

#### Stainless steel V2A (option)

Due to its components stainless steel V2A is an alloy almost completely impervious to detergents and disinfectants and is therefore excellently suited for the use in the food and pharmaceutical industries, in kitchens, laboratories and other clean rooms. And it looks good into the bargain, as well!

#### Stainless steel V4A + varnish (option)

V4A quality stainless steel with an additional coat of protective varnish is outstandingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.

600 x 600 mm



Large space analog double face

Type series **372** 























of this type series will be supplied including a remotable DCF77 aerial (IP 6B). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km eround Mainflingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

400 x 400 mm

	400x400mn	Surcharge	500x500mm	n Surcharge	600x600m	m Surcharge
Options	Suffix	€ each	Suffix	€ each	Suffix	€ each
Case enamelled in metallic silver grey RAL 9006	-05	95	-05	105	-05	125
Case enamelled in metallic dark gun metal DB 703	-06	95	-06	105	-06	125
Case custom enamelled	-10	on request	-10	on request	-10	on request
Case stainless steel V2A, matted finish	-20	on request	-20	on request	-20	on request
Case stainless steel V4A, blasted and varnished	-22	on request	-22	on request	-22	on request
Case with lugs for suspension by ropes or chains	-30	on request	-30	on request	-30	on request
Custom logo on clock face	-47	on request	-47	on request	-47	on request
Packaging against dust and spray (IP 54)	-54	150	-54	150	-54	150

**Clock type Mounting ▼** € each Item No. € each Item No. **€** each Item No. DCF77 radio controlled clock, battery operated 2 x 1.5 V<sup>1) 2)</sup> wall 51.**372**.422 1,624.- 51.372.522 1,855.-2,079.-51.372.622 ceiling 51.**372**.423 **1,624.-** 51.**372**.523 1.855.-51.372.623 2,079.-DCF77 radio controlled clock, mains operated 230 VAC<sup>2)</sup> wall 52 **372** 422 1.664.-52.372.522 1.895.-52.372.622 2.119.ceiling 52.**372**.423 **1.664.** 52.**372**.523 1.895.-52.372.623 2.119.-71.**372**.622 Slave clock, minute pulse 12...60 V wall 71.372.422 1,275.-71.**372**.522 1.505.-1,725.ceiling 71.**372**.423 **1,275.-** 71.**372**.523 1,505.-71.**372**.623 1,725.-Slave clock, minute/second pulse 12/24 V 1.955.wall 72.**372**.422 **1,725.-** 72.**372**.522 72.**372**.622 2,175.ceiling 72.**372**.423 1,725.-72.**372**.523 1.955.-72.**372**.623 2,175.-Slave clock, minute pulse 12/24 V, wall 74.372.422 **2,095.-** 74.**372**.522 2,325.-74.**372**.622 2,545.synchronous second hand 230 VAC/50 Hz ceiling 74.**372**.423 74.**372**.523 74.**372**.623 2.095.-2.325.-2.545.-Telegram slave clock, DCFport24, 24 V wall 81.372.422 1,389.- 81.372.522 1,619.-81.**372**.622 1,840.ceiling 81.372.423 **1,389.-** 81.**372**.523 **1,619.-** 81.**372**.623 1,840.-RC telegram slave clock, AirPort24, wall 84.**372**.422 1,539.-84.**372**.522 1,769.-84.372.622 1,990.-**1.539.** 84.**372**.523 1.990.battery operated 2 x 1,5 V<sup>1)</sup> ceiling 84.372.423 1.769.-84.372.623 RC telegram slave clock, AirPort24, wall 85.372.422 **1,579.-** 85.**372**.522 1,809.-85.**372**.622 2,030.mains operated 230 VAC, with outage reserve ceiling 85.372.423 1,579.- 85.372.523 1,809.-85.372.623 2,030.-NTP system clock (NTP client), wall 91.372.422 **1,619.-** 91.**372**.522 91.372.622 1.849.-2.070.ceiling 91.372.423 **1,849.-** 91.**372**.623 2,070.synchronisation by LAN, PoE3 **1,619.-** 91.**372**.523

<sup>&</sup>lt;sup>1)</sup>Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces four faces, indoor



Large space analog four faces

390























Clock cubes with solid, industrial grade metal cases for large halls or places of high publicity. Always the correct time, exactly readable from any angle!





for indoor and outdoor use see pages 164 and 165.





■ edge length cir. 565 mm, with four square faces, cir. 425 x 425 mm sturdy metal cube, enamelled in white (RAL 9016) as standard. Optionally, at a surcharge, enamelled in custom colours. A large hinged inspection flap on the top provides easy access for maintenance.

Protection grade IP 40 (EN 60529).

#### Mounting

This clock cube will usually be suspended from the ceiling by metal ropes or chains. Due to varying requirements, ropes or chains are to be procured locally. Four eyebolts are provided on the top of the case.

#### **Front glasses**

Flat shock-resistant Plexiglas® XT (PMMA).

#### Faces

High distinction white metal with large black Arabic numerals or large black DIN bar markings for easy, doubt-free reading even over longer distances. Visible face dimensions cir. 400×400 mm.
Faces printed according to DIN 41091

#### Hands

Black bar-type hour and minute hands. Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

























clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainfilingen (50 km east of Frankfurt/M.).

## PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

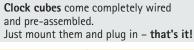
PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP NTP system clocks require a

PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

## Backlighted clock cubes

for indoor and outdoor use see pages 164 and 165.



	Arabic num	Arabic numerals		gs
Clock type	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	52. <b>390</b> .415	2,195	52. <b>390</b> .425	2,195
Slave clock, minute pulse 1260 V	71. <b>390</b> .415	1,850	71. <b>390</b> .425	1,850
Slave clock, minute/second pulse 12/24 V	72. <b>390</b> .415	2,750	72. <b>390</b> .425	2,750
Slave clock, minute pulse 12/24 V, synchronous second hand 230 V AC/50 Hz	74. <b>390</b> .415	3,490	74. <b>390</b> .425	3,490
Telegram slave clock, DCFport24, 24 V	81. <b>390</b> .415	1,989	81. <b>390</b> .425	1,989
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>390</b> .415	2,219	85. <b>390</b> .425	2,219
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	91. <b>390</b> .415	2,249	91. <b>390</b> .425	2,249
	Arab. num.	Surcharge	Bar mark.	Surcharge

Options	Arab. num. Suffix	Surcharge € each		Surcharge € each
Cube custom enamelled	-13	on request	-13	on request

### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Clocks for Large Spaces four faces, indoor



Large space analog four faces





























Clock cubes with solid, industrial grade metal cases for large halls or places of high publicity. Always the correct time, exactly readable from any angle!



△ Case custom enamelled (option)

## Backlighted clock cubes

for indoor and outdoor use see pages 164 and 165.





- edge length cir. 500 mm, with four round faces, diameter cir. 400 mm
- edge length cir. 625 mm, with four round faces, diameter cir. 500 mm sturdy metal cube, enamelled in white (RAL 9016) as standard. Optionally, at a surcharge, case and/or clock rims enamelled in custom colours. A large hinged inspection flap on the top provides easy access for maintenance. Protection grade IP 40 (EN 60529).

#### Mounting

This clock cube will usually be suspended from the ceiling by metal ropes or chains. Due to varying requirements, ropes or chains are to be procured locally.

Four eyebolts are provided on the top of the case.

#### Front glasses

Domed shock-resistant Plexiglas® XT (PMMA). As an option, low reflectivity front glasses are available.

#### **Faces**

High distinction white metal with large black Arabic numerals or large black DIN bar markings for easy, doubt-free reading even over longer distances. Visible face diameter cir. 400 mm and cir. 500 mm respectively.

Faces printed according to DIN 41 091

#### Hands

Black bar-type hour and minute hands. Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

> Clock cubes come completely wired and pre-assembled. Just mount them and plug in - that's it!

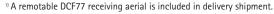
	Face	Arabic nume		Bar marking	s
Clock type	diameter	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	400 mm	52. <b>395</b> .415	2,725	52. <b>395</b> .425	2,725
Slave clock, minute pulse 1260 V	400 mm	71. <b>395</b> .415	2,390	71. <b>395</b> .425	2,390
Slave clock, minute/second pulse 12/24 V	400 mm	72. <b>395</b> .415	3,290	72. <b>395</b> .425	3,290
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	400 mm	74. <b>395</b> .415	4,030	74. <b>395</b> .425	4,030
Telegram slave clock, DCFport24, 24 V	400 mm	81. <b>395</b> .415	2,530	81. <b>395</b> .425	2,530
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	400 mm	85. <b>395</b> .415	2,760	85. <b>395</b> .425	2,760
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	400 mm	91. <b>395</b> .415	2,790	91. <b>395</b> .425	2,790

	Face	Arabic nume	rals	Bar markings	,
Clock type	diameter	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	500 mm	52. <b>395</b> .515	3,325	52. <b>395</b> .525	3,325
Slave clock, minute pulse 1260 V	500 mm	71. <b>395</b> .515	2,990	71. <b>395</b> .525	2,990
Slave clock, minute/second pulse 12/24 V	500 mm	72. <b>395</b> .515	3,890	72. <b>395</b> .525	3,890
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	500 mm	74. <b>395</b> .515	4,630	74. <b>395</b> .525	4,630
Telegram slave clock, DCFport24, 24 V	500 mm	81. <b>395</b> .515	3,325	81. <b>395</b> .525	3,325
Telegram slave clock, DCFport24, mains operated 230 V	500 mm	83. <b>395</b> .515	3,225	83. <b>395</b> .525	3,225
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	500 mm	85. <b>395</b> .515	3,415	85. <b>395</b> .525	3,415
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	500 mm	91. <b>395</b> .515	3,465	91. <b>395</b> .525	3,465

Options	Arab. num. Suffix	Surcharge € each		Surcharge € each
Cube custom enamelled	-13	on request	-13	on request
Clock rims custom enamelled	-14	on request	-14	on request
Clock rims enamelled in metallic dark gun metal DB 703	-16	none	-16	none
Low reflectivity front glasses	-51	on request	-51	on request

### Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.



<sup>&</sup>lt;sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



Large space analog four faces





















#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

#### **Backlighted** clock cubes

for indoor and outdoor use see pages 164 and 165.







Whether you look for dust-, water- or vapour-proof clocks (acc. to IP grade 64), clocks for high temperatures in sauna cabins, pace clocks indicating split times or clocks for surgical operating rooms in hospitals or other "clean room" applications – on the following pages you will find clocks for all specific requirements ...



## **Wall Clocks**

## waterproof, steam proof, dust proof

These clocks are packaged in waterproof, steam proof and dust proof cases and thus perfectly suitable for "critical" areas with blown dust and water thrown in sheets or other demanding environments.

They are not suitable for sauna cabins. Sauna clocks may be found on page 91 only.

#### Case

cir. 300 mm diameter white plastic case, dust- and waterproof according to IP 64 (EN 60529).

#### Front glass

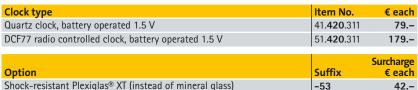
Flat mineral glass, black sealing ring. Also available with shock-resistant Plexiglas® XT (option).

White face with large black Arabic numerals for easy, doubt-free reading even over longer distances.

Black bar-type hour and minute hands, red second hand.



Clock type	Item No.	€ each
Quartz clock, battery operated 1.5 V	41. <b>420</b> .311	79.–
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>420</b> .311	179
		Surcharge





Indoor analog single face





















clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced



## **Wall Clock**

## soundless, for relaxation rooms



**Indoor** analog single face

Type series 423









Wall clock in a wooden case with soundless Quartz clockwork and creeping second hand. Excellently suited for relaxation rooms within spa facilities (not suitable for sauna cabins. Sauna clocks may be found on page 91 only).

#### Case

cir. 220 mm diameter Ayous wood. Protection grade IP 40 (EN 60529).

### Front glass

Domed mineral glass.

#### Face

Metal, enamelled white with large black Arabic numerals.

#### Hands

Black bar-type hour and minute hands, red second hand.



Clock type	Item No.	<b>€</b> each
Quartz clock, soundless, battery operated 1.5 V	44. <b>423</b> .211	148

creeping second handsoundless clockwork





## Sauna Slave Clocks

## heat resistant

Special slave clockworks and specially treated wooden cases facilitate professional use of these clocks in private or public saunas. Suited for the use in sauna cabins (up to cir. 95 °C).

### Case

cir. 220 mm diameter

cir. 230 x 230 mm

Special Ayous wood will not crack even under most severe fluctuations of temperature and humidity. Protection grade IP 40 (EN 60 529).

### Front glass

Heat resistant mineral glass.

Metal, enamelled white with large black Arabic numerals.

Black bar-type hour and minute hands.



Clock type	Dimensions	Item No.	€ each
Slave clock, minute pulse 24 V	220 mm diameter	71. <b>425</b> .211	239
Slave clock, minute pulse 24 V	230 x 230 mm	71. <b>426</b> .211	229
			Surcharge



Indoor analog single face

Type series	
425	











€ each

on request

Suffix







page 172 on, or page 178).



Custom logo on clock face (minimum order of 50)



# **Training Clocks/Pace Clocks** for indoors water protected, with seconds cross



Indoor analog single face

430















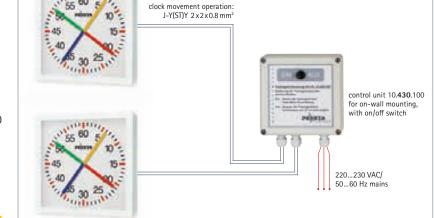




This kind of training/pace clock indicates split times during swim training/warm-up training. Times are taken by each swimmer individually. The 4-coloured seconds cross indicates the time elapsed, one complete turn corresponds to exactly 60 seconds.

For parallel operation of 2 training clocks, the slave clock type connected to the central control unit 10.430.100 is recommended. Thus an identical display (synchronous time) is always guaranteed on both training clocks connected.

> Diagram shows 2 training clocks 71.431.611 with control unit 10.430.100



recommended wire for

#### **Backlighted** training clocks

for indoors and outdoors see pages 162 and 163.





cir. 600 x 600 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below. A stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), blasted and additionally coated with a protective varnish, is available as an option. Clock movement protected according to IP54 (EN 60529).

Resistance to thrown balls acc. to DIN 18032, part 3 (option) Wrench-off-proof mounting fixture and two-ply laminated mineral safety glass, thus suitable for ball sports facilities when durably mounted on-

#### **Clock types**

wall.

Quartz movement, battery operated (2 x 1.5 V "Alkaline" LR 20, included). Portable, therefore suitable for mobile use.

ON/OFF switch on reverse side. With carrying handle. Setup on the edge of the pool. 2 pivoted feet ensure a firm position of clock on the ground. Or wall mounting.

- Quartz movement, mains operated 230 VAC. Recommended for continuous operation and for durable, fixed on-wall position. Wall mounting and fixed power supply only, incl. wrench-off-proof 3-point mounting fixture.
- Slave movement, pulse operated 24 V. To be operated by fixed connection to control unit 10.430.100 only.

Recommended for synchronized, parallel operation of 2 training clocks/pace clocks 71.430.611 in securely fixed positions.

Wall mounting only, incl. 3-point wrench-off-proof mounting fixture. Control unit 10.430.100 is required for operation.



#### Face

High distinction white metal with red/ black second bars and black numerals for easy, doubt-free reading. Reading distance cir. 30 m.

4-coloured seconds cross, intervals in second cycles.

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard

#### **Funct**

The (s used b taneo

The cr elanse

The swimmer will wait for a maximum of 14 seconds until the next colour of the four second hands ("his" colour) reaches the 12-o'clock-position and will then memorise the colour of "his" hand. Upon reaching the edge of the pool (after 1 or 2 laps) the time elapsed can be read according to the position of "his" second hand.

#### Stainless steel V4A + varnish (option)

V4A quality stainless steel with an additional coat of protective varnish is outstandingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.

tion	
swim) training/pace clock can be	
by any number of swimmers simul-	and the same of
ously.	
rossed second hands show the time	
ed in seconds.	

Indoor analog single face



















Technical data	
Operating power (quartz clock type, battery operated)	2 x 1.5 V Mono/LR 20
Operating power (quartz clock type, mains operated)	220230 VAC
Operating power (slave clock type, pulse operated)	24 V second pulses
Duration of operation in permanent use (battery operated)	cir. 1,000 hours
Intervals	second cycles
Dial sections	060
Reading distance	cir. 30 m

Clock type	Item No.	€ each
Quartz clock, battery operated 2 x 1.5 V	41. <b>430</b> .611	960
Quartz clock, mains operated 230 VAC	42. <b>430</b> .611	950
Slave clock, minute pulse 24 V (second cycles)	71. <b>430</b> .611	795

Accessory	Item No.	€ each
Control unit for 2 training clocks 71.430.611, operating power 220230 VAC/5060 Hz, ON/OFF switch	10. <b>430</b> .100	349

Options	OptNr.	Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	59
Case enamelled in metallic dark gun metal DB 703	-06	59
Case custom enamelled	-10	on request
Case stainless steel V4A, blasted and varnished	-22	on request
Custom logo on clock face	-47	on request
Resistance to thrown balls acc. to DIN 18032, part 3 (types 42.430.611 and 71.430.611 only)	-59	179.–

## Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V4A + clear varnish	-22

Clock cases made of stainless steel V4A, matted and varnished (option), are resistant to saltwater and other media containing chlorine. They are therefore excellently suited for permanent use in public swim-

#### **Backlighted** training clocks

for indoors and outdoors see pages 162 and 163.



# **Training Clocks/Pace Clocks** for indoors water protected, with minute and second hands



Indoor analog single face





















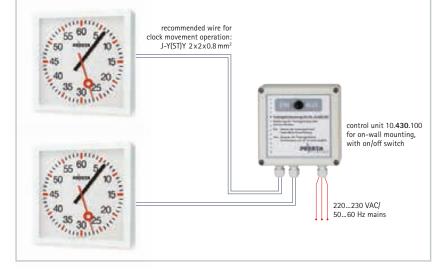




This kind of training/pace clock indicates split times during swim training/warm-up training. Times are taken by each swimmer individually. The clock indicates the elapsed time in minutes and seconds.

For parallel operation of 2 training clocks, the slave clock type connected to the central control unit 10.430.100 is recommended. Thus an identical display (synchronous time) is always guaranteed on both training clocks connected.

> Diagram shows 2 training clocks 71.431.611 with control unit 10.430.100



41.**431**.611 shown



cir. 600 x 600 mm

very sturdy metal case, enamelled white (RAL 9016). Optionally, at a surcharge, enamelled in metallic silver grey (RAL 9006), in dark gun metal (DB 703) or custom enamelled, as listed below. A stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), blasted and additionally coated with a protective varnish, is available as an option. Clock movement protected according to IP 54 (EN 60 529).

Resistance to thrown balls acc. to DIN 18 032, part 3 (option) Wrench-off-proof mounting fixture and two-ply laminated mineral safety glass, thus suitable for ball sports facilities when durably mounted on-

#### **Clock types**

wall.

 Quartz movement, battery operated (2 x 1.5 V "Alkaline" LR 20, included).
 Portable, therefore suitable for mobile use.

ON/OFF switch on reverse side. With carrying handle. Setup on the edge of the pool. 2 pivoted feet ensure a firm position of clock on the ground. Or wall mounting.

- Quartz movement, mains operated 230 VAC. Recommended for continuous operation and for durable, fixed on-wall position. Wall mounting and fixed power supply only, incl. wrench-off-proof 3-point mounting fixture.
- Slave movement, pulse operated 24 V. To be operated by fixed connection to control unit 10.430.100 only.

Recommended for synchronized, parallel operation of 2 training clocks/pace clocks 71.430.611 in securely fixed positions.

Wall mounting only, incl. 3-point wrench-off-proof mounting fixture. Control unit 10.430.100 is required for operation.



#### Face

High distinction white metal with red/ black second bars and black numerals for easy, doubt-free reading. Reading distance cir. 30 m.

#### Hands

Black minute hand. Red second hand with "eye", intervals in second cycles.

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

#### **Function**

The (swim) training/pace clock can be used by any number of swimmers simultaneously.

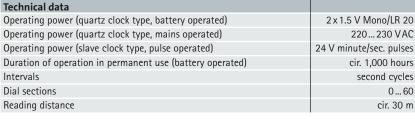
The elapsed time is displayed in minutes and seconds.

The swimmer will wait for a maximum of 59 seconds until the second hand reaches the 12-o'clock-position and will then memorise the position of the minute hand.

Upon finishing a training round the time elapsed can be easily calculated (time indicated minus the minutes memorised.

Stainless steel V4A + varnish (option)

V4A quality stainless steel with an additional coat of protective varnish is outstandingly resistant to acids and other chlorous media and is therefore particularly suited for public swimming pools as well as for the chemical industry.



Clock type	Item No.	€ each
Quartz clock, battery operated 2 x 1.5 V	41. <b>431</b> .611	1,100
Quartz clock, mains operated 230 VAC	42. <b>431</b> .611	1,090
Slave clock, minute pulse 24 V (second cycles)	71. <b>431</b> .611	935

Accessory	Item No.	€ each
Control unit for 2 training clocks 71.431.611, operating power 220230 VAC/5060 Hz, ON/OFF switch	10. <b>430</b> .100	349.–

		Surcharge
Options	OptNr.	€ each
Case enamelled in metallic silver grey RAL 9006	-05	59
Case enamelled in metallic dark gun metal DB 703	-06	59
Case custom enamelled	-10	on request
Case stainless steel V4A, blasted and varnished	-22	on request
Custom logo on clock face	-47	on request
Resistance to thrown balls acc. to DIN 18032, part 3 (types 42.430.611 and 71.430.611 only)	-59	179.–

Options – just as you like them ...
These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

Case colour	Suffix
metallic silver grey RAL 9006	-05
dark gun metal DB 703	-06
? custom enamelled	-10
stainless steel V4A + clear varnish	-22

Clock cases made of stainless steel V4A, matted and varnished (option), are resistant to saltwater and other media containing chlorine. They are therefore excellently suited for permanent use in public swimming pools.



**Indoor** analog single face

Type series 431





















# Analog Clocks for In-Wall Mounting ideal for surgical operating rooms and other clean rooms



Indoor analog flush-mounted















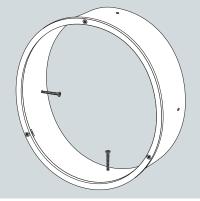








These round analog clocks with stainless steel V4A cases were designed with the surgical operating room in mind. Mounted in-wall, flush with the surface, these reliable and accurate clocks meet all hygienic standards. Also suitable for all other demanding environments such as the pharmaceutical, beverage and food industries.



Metal mounting frame 01.460.300 for in-wall mounting in conventional brick walls (flush with tiles or plaster)



Clock 73.460.310 for in-wall mounting with spring-clip attachment device 01.460.301 for stud-and-panel wall mounting



cir. 301 mm diameter

cir. 401 mm diameter very high grade stainless steel case (1.4571 X6CrNiMoTi 17-12-2. German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54

## (EN 60 529). Mounting

- built-in/plaster
- in stud-and-panel wall A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock.

#### Front glass

Flat mineral glass, 3 mm. Optionally treated for low reflectivity.

#### **Face**

High distinction white metal with black Arabic numerals. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hands on minute pulse 12... 60 V controlled slave clocks.



Indoor analog flush-mounted

















#### clocks DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km

#### PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

around Mainflingen (50 km

east of Frankfurt/M.).

#### PEWETA AirPort24 PEWETA AirPort24 slave clocks

require an AirPort24 transmitter or repeater respectively (see page 177).

## NTP

1,254.-

1,044.-

880.-

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

#### Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.

**1,120.-** 75.**460**.410

**745.-** 81.**460**.410

**910.-** 85.**460**.410

Mounting dimensions		301 mm diamet	er	401 mm diai	meter
With mounting frame	mounting frame diameter	cir.	301 mm		cir. 401 mm
(conventional brick walls)	wall breakout diameter	cir.	301 mm		cir. 401 mm
	minimum depth	ci	r. 63 mm		cir. 63 mm
With spring clips	clock case diameter	cir.	301 mm		cir. 401 mm
(stud-and-panel walls)	wall breakout diameter	cir.	282 mm		cir. 382 mm
	minimum depth	ci	r. 60 mm		cir. 60 mm
Technical data 301 mm diameter				401 mm dia	motor
				401 mm alai	
Face	visible face diameter	cir.	250 mm		cir. 350 mm
	print diameter cir. 240 mm		cir. 340 mn		
		301 mm diamet	er	401 mm diai	meter
Clock type		Item No.	€ each	Item No.	€ each
DCF77 radio controlled clo	ock, mains operated 230 VAC 1)	52. <b>460</b> .310	965	52. <b>460</b> .410	1,098
Slave clock, minute pulse 1260 V		71. <b>460</b> .310	735	71. <b>460</b> .410	869
Slave clock, minute/second pulse 12/24 V		72. <b>460</b> .310	960	72. <b>460</b> .410	1,094
Slave clock, minute/second pulse 12/24 V, extra low noise motion		73. <b>460</b> .310	1,100	73. <b>460</b> .410	1,234
Slave clock, minute pulse	12/24 V, synchronous second hand 230 V AC/50 Hz	74. <b>460</b> .310	1,145	74. <b>460</b> .410	1,279

NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3</sup>	91. <b>460</b> .310	895	91. <b>460</b> .410	1,029
Mounting kits (please order one frame or kit per clock)	301 mm diame		401 mm dian	neter € each
Metal mounting frame for in-wall mounting in conventional brick walls (diameter x depth: 301 x 60 mm, 401 x 60 mm respectively)	01. <b>460</b> .300	none	01. <b>460</b> .400	none
Mounting kit for stud-and-panel walls  (spring-clip attachment device/no mounting frame required)	01. <b>460</b> .301	none	01. <b>460</b> .401	none

75.**460**.310

81.**460**.310

85.**460**.310

Option	301 mm Suffix	Surcharge € each		Surcharge € each
Front glass treated for low reflectivity	-49	49	-49	49

Slave clock, second pulse 12/24 V, with creeping minute hand

RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve

Telegram slave clock, DCFport24, 12/24 V

<sup>1)</sup> A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Analog Clocks for In-Wall Mounting ideal for surgical operating rooms and other clean rooms



Indoor analog flush-mounted













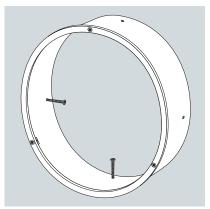








These round analog clocks with stainless steel V4A cases were designed with the surgical operating room in mind. Mounted in-wall, flush with the surface, these reliable and accurate clocks meet all hygienic standards. Also suitable for all other demanding environments such as the pharmaceutical, beverage and food industries.



Metal mounting frame 01.460.300 for in-wall mounting in conventional brick walls (flush with tiles or plaster)



Clock 73.460.320 for in-wall mounting with spring-clip attachment device 01.460.301 for stud-and-panel wall mounting



cir. 301 mm diameter

cir. 401 mm diameter very high grade stainless steel case (1.4571 X6CrNiMoTi 17-12-2. German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54

## (EN 60 529). Mounting

- built-in/plaster
- in stud-and-panel wall A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock.

#### Front glass

Flat mineral glass, 3 mm. Optionally treated for low reflectivity.

#### **Face**

High distinction white metal with black DIN bar markings. Face printed according to DIN 41091.

#### Hands

Pointed black bar-type hour and minute hands, red second hand.

No second hands on minute pulse  $12...60 \, V$ controlled slave clocks.



Indoor analog flush-mounted

## Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.























clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Mounting dimensions		301 mm diameter	401 mm diameter
With mounting frame	mounting frame diameter	cir. 301 mm	cir. 401 mm
(conventional brick walls)	wall breakout diameter	cir. 301 mm	cir. 401 mm
	minimum depth	cir. 63 mm	cir. 63 mm
With spring clips	clock case diameter	cir. 301 mm	cir. 401 mm
(stud-and-panel walls)	wall breakout diameter	cir. 282 mm	cir. 382 mm
	minimum denth	cir. 60 mm	cir. 60 mm

Technical data		301 mm diameter	401 mm diameter
Face	visible face diameter	cir. 250 mm	cir. 350 mm
	print diameter	cir. 240 mm	cir. 340 mm

	301 mm diam	eter	401 mm diar	neter
Clock type	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	52. <b>460</b> .320	965	52. <b>460</b> .420	1,098
Slave clock, minute pulse 1260 V	71. <b>460</b> .320	735	71. <b>460</b> .420	869
Slave clock, minute/second pulse 12/24 V	72. <b>460</b> .320	960	72. <b>460</b> .420	1,094
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>460</b> .320	1,100	73. <b>460</b> .420	1,234
Slave clock, minute pulse 12/24 V, synchronous second hand 230 V AC/50 Hz	74. <b>460</b> .320	1,145	74. <b>460</b> .420	1,279
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>460</b> .320	1,120	75. <b>460</b> .420	1,254
Telegram slave clock, DCFport24, 12/24 V	81. <b>460</b> .320	745	81. <b>460</b> .420	880
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>460</b> .320	910	85. <b>460</b> .420	1,044
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>460</b> .320	895	91. <b>460</b> .420	1,029

	301 mm diameter		401 mm diameter	
Mounting kits (please order one frame or kit per clock)	Item No.	€ each	Item No.	€ each
Metal mounting frame for in-wall mounting in conventional brick walls (diameter x depth: 301 x 60 mm, 401 x 60 mm respectively)	01. <b>460</b> .300	none	01. <b>460</b> .400	none
Mounting kit for stud-and-panel walls (spring-clip attachment device/no mounting frame required)	01. <b>460</b> .301	none	01. <b>460</b> .401	none

Option	301 mm Suffix	Surcharge € each		Surcharge € each
Front glass treated for low reflectivity	-49	49	-49	49

<sup>1)</sup> A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Analog Clocks for In-Wall Mounting ideal for surgical operating rooms and other clean rooms



Indoor analog flush-mounted









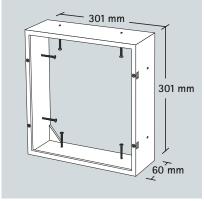








These square analog clocks with stainless steel V4A cases were designed with the surgical operating room in mind. Mounted in-wall, flush with the surface, these reliable and accurate clocks meet all hygienic standards. Also suitable for all other demanding environments such as the pharmaceutical, beverage and food industries.



Metal mounting frame 01.470.300 for in-wall mounting in conventional brick walls (flush with tiles or plaster)



Clock 73.470.310 for in-wall mounting with spring-clip attachment device 01.470.301 for stud-and-panel wall mounting



cir. 301 x 301 mm

very high grade stainless steel case (EN 60 529).

- in stud-and-panel wall
- A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock. Optionally, at a surcharge, the clock may also be configured for on-wall mounting.

#### Front glass

Flat mineral glass, 3 mm. Optionally treated for low reflectivity.

High distinction white metal with black Arabic numerals. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hands on minute pulse 12... 60 V controlled slave clocks.

#### Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.

01.470.302



Indoor analog flush-mounted

Type series	
470	























#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

269.-

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

(1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54

### Mounting

- built-in/plaster
- on-wall mounting (optional)

	with mounting frame	for stud-and-panel walls
Clock case (width x height)	cir. 301 x 301 mm	cir. 301 x 301 mm
Wall breakout (width x height)	cir. 301 x 301 mm	cir. 282 x 277 mm
Depth	cir. 63 mm	cir. 60 mm
- 1 * 11 *		

Technical data		
Face	print diameter	cir. 235 mm
	face dimensions	cir. 270 x 270 mm
Power consumption	slave clock, minute pulse 24 V	cir. 6 mA
	slave clock, minute/second pulse 24 V	cir. 12 mA

Clock type	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC 1)	52. <b>470</b> .310	965
Slave clock, minute pulse 1260 V	71. <b>470</b> .310	735
Slave clock, minute/second pulse 12/24 V	72. <b>470</b> .310	960
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>470</b> .310	1,100
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>470</b> .310	1,145
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>470</b> .310	1,120
Telegram slave clock, DCFport24, 12/24 V	81. <b>470</b> .310	745
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>470</b> .310	910
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>470</b> .310	895
Mounting kits (please order one frame or kit per clock)	Item No.	€ each
Metal mounting frame for in-wall mounting in conventional brick walls	01.470.300	none
Mounting kit for stud-and-panel walls (spring-clip attachment device/no mounting frame required)	01. <b>470</b> .301	none

Option	Suffix	Surcharge € each
Front glass treated for low reflectivity	-49	49

Case for on-wall mounting (stainless steel V4A)

<sup>1)</sup> A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup>NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# Analog Clocks for In-Wall Mounting ideal for surgical operating rooms and other clean rooms



Indoor analog flush-mounted















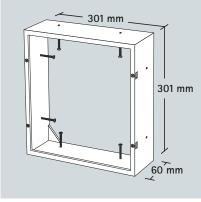








These square analog clocks with stainless steel V4A cases were designed with the surgical operating room in mind. Mounted in-wall, flush with the surface, these reliable and accurate clocks meet all hygienic standards. Also suitable for all other demanding environments such as the pharmaceutical, beverage and food industries.



Metal mounting frame 01.470.300 for in-wall mounting in conventional brick walls (flush with tiles or plaster)



Clock 73.470.330 (with fine-line markings) for in-wall mounting with spring-clip attachment device 01.470.301 for stud-and-panel wall



cir. 301 x 301 mm

very high grade stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54 (EN 60 529).

#### Mounting

- built-in/plaster
- in stud-and-panel wall
- on-wall mounting (optional)
  A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock. Optionally, at a surcharge, the clock may also be configured for on-wall mounting.

#### Front glass

Flat mineral glass, 3 mm. Optionally treated for low reflectivity.

#### Face

High distinction white metal with black DIN bar or black fine-line markings. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hands on minute pulse 12... 60 V controlled slave clocks.



Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.



**Indoor** analog flush-mounted

Type series
470
170

















clocks





## DCF77 radio controlled

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

## **PEWETA DCFport24**PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NTP

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Agunting dimensions	with mounting frame	for stud-and-panel walls
		ical operating rooms and ms.

Mounting dimensions	frame	walls
Clock case (width x height)	cir. 301 x 301 mm	cir. 301 x 301 mm
Wall breakout (width x height)	cir. 301 x 301 mm	cir. 282 x 277 mm
Depth	cir. 63 mm	cir. 60 mm
*   ·		

Technical data		
Face	print diameter	cir. 235 mm
	face dimensions	cir. 270 x 270 mm
Power consumption	slave clock, minute pulse 24 V	cir. 6 mA
	slave clock, minute/second pulse 24 V	cir. 12 mA

	DIN bars		fine-line	
Clock type	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC 1)	52. <b>470</b> .320	965	52. <b>470</b> .330	965
Slave clock, minute pulse 1260 V	71. <b>470</b> .320	735	71. <b>470</b> .330	735
Slave clock, minute/second pulse 12/24 V	72. <b>470</b> .320	960	72. <b>470</b> .330	960
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>470</b> .320	1,100	73. <b>470</b> .330	1,100
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>470</b> .320	1,145	74. <b>470</b> .330	1,145
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>470</b> .320	1,120	75. <b>470</b> .330	1,120
Telegram slave clock, DCFport24, 12/24 V	81. <b>470</b> .320	745	81. <b>470</b> .330	745
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>470</b> .320	910	85. <b>470</b> .330	910
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>470</b> .320	895	91. <b>470</b> .330	895

Mounting kits (please order one frame or kit per clock)	Item No.	€ each
Metal mounting frame for in-wall mounting in conventional brick walls	01. <b>470</b> .300	none
Mounting kit for stud-and-panel walls	01. <b>470</b> .301	none
(spring-clip attachment device/no mounting frame required)		
Case for on-wall mounting (stainless steel V4A)	01. <b>470</b> .302	269

		Surcharge
Option	Suffix	€ each
Front glass treated for low reflectivity	-49	49

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Analog Clocks for In-Wall Mounting**

with digital stopwatch display, ideal for surgical operating rooms



Indoor analog/digital flush-mounted























These analog clocks with LED digital stopwatch display with stainless steel V4A cases were designed with the surgical operating room in mind. Mounted in-wall, flush with the surface, these reliable and accurate clocks meet all hygienic standards. Also suitable for all other demanding environments such as the pharmaceutical, beverage and food industries.





For operating the stopwatch mode of the LED digital display we provide different remote control units in stainless steel cases. For a detailed product description please see page 110.



#### cir. 301 x 387 mm

very high grade stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54 (EN 60 529).

#### Mounting

- built-in/plaster
- in stud-and-panel wall
- on-wall mounting (optional) A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock. Optionally, at a surcharge, the clock may also be configured for on-wall mounting.

#### Front glass

Flat mineral glass, 3 mm. Glass on digital display is treated for low reflectivity. On analog face, low reflective glass is available as an option.

#### Face

High distinction white metal with black Arabic numerals. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hands on minute pulse 12... 60 V controlled slave clocks.

#### LED digital display

6-digit 7-segment LED bars, digit colour red (option: amber or green). Digit height 25 mm. Automatic brightness control. Power supply is 230 VAC mains as standard, 12 V DC (option). Power loss reserve: Time telegram/pulse storage to cover cir. 100 hours.

#### Stopwatch mode

The 6-digit display will show hours, minutes and seconds, counting up from start. The stopwatch system is controlled by a remote control unit (as an extra), for technical data see page 110.

#### Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.

Mounting dimensions	with mounting frame	for stud-and-panel walls
clock case (width x height)	cir. 301 x 387 mm	cir. 301 x 387 mm
wall breakout (width x height)	cir. 301 x 387 mm	cir. 282 x 362 mm
depth	cir. 81 mm	cir. 78 mm

Technical data		
Analog face	print diameter	cir. 235 mm
	face dimensions	cir. 270 x 270 mm
Digit height	digital display	25 mm
Electrical values	operating voltage for digital display	230 VAC
	optional operating voltage for digital display	12 VDC
	power consumption LED display	cir. 9 VA

	•	
Clock type	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC 1)	52. <b>480</b> .310	1,695
Slave clock, minute pulse 1260 V	71. <b>480</b> .310	1,490
Slave clock, minute/second pulse 12/24 V	72. <b>480</b> .310	1,715
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>480</b> .310	1,855
Slave clock, minute pulse 12/24 V, synch. second hand 230 V AC/50 Hz	74. <b>480</b> .310	1,900
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>480</b> .310	1,875
Telegram slave clock, DCFport24, 12/24 V	81. <b>480</b> .310	1,530
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>480</b> .310	1,694
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>480</b> .310	1,679
Mounting kits (please order one frame or kit per clock)	Item No.	€ each
Metal mounting frame (width x height x depth: cir. 301 x 387 x 78 mm) for in-wall mounting in conventional brick walls	01.480.300	none

Mounting kits (please order one frame or kit per clock)	Item No.	€ each
Metal mounting frame (width x height x depth: cir. 301 x 387 x 78 mm) for in-wall mounting in conventional brick walls	01. <b>480</b> .300	none
Mounting kit for stud-and-panel walls (spring-clip attachment device/no mounting frame required)	01. <b>480</b> .301	none
Case for on-wall mounting (stainless steel V4A)	01.480.302	295
Assessmins	Idama Nia	C anala

Ac	cessories	Item No.	€ each
	mote control with mounting frame for in-wall mounting, ainless steel V4A	02. <b>498</b> .100	795.–
	mote control for stud-and-panel wall mounting by means of spring clip tachment device, stainless steel V4A (no mounting frame required)	02. <b>498</b> .101	795.–
На	nd-held remote control, stainless steel V4A	02.498.102	795

Outland	Suffix	Surcharge € each
Options	Sumix	€ eacn
Front glass of analog clock treated for low reflectivity	-49	49
Mains adapter 12 V DC for LED digital display	-70	none
Amber (instead of red) digital display	-78	on request
Green (instead of red) digital display	-79	on request
Date display during inactivity of stopwatch mode	-81	on request



Indoor analog/digital flush-mounted





















DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

105

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by



# **Analog Clocks for In-Wall Mounting**

with digital stopwatch display, ideal for surgical operating rooms



Indoor analog/digital flush-mounted

Type series 480



















These analog clocks with LED digital stopwatch display with stainless steel V4A cases were designed with the surgical operating room in mind. Mounted in-wall, flush with the surface, these reliable and accurate clocks meet all hygienic standards. Also suitable for all other demanding environments such as the pharmaceutical, beverage and food industries.





For operating the stopwatch mode of the LED digital display we provide different remote control units in stainless steel cases. For a detailed product description please see page 110.



#### cir. 301 x 387 mm

very high grade stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54 (EN 60 529).

#### Mounting

- built-in/plaster
- in stud-and-panel wall
- on-wall mounting (optional) A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock. Optionally, at a surcharge, the clock may also be configured for on-wall mounting.

### Front glass

Flat mineral glass, 3 mm. Glass on digital display is treated for low reflectivity. On analog face, low reflective glass is available as an option.

#### Face

High distinction white metal with black DIN bar markings. Face printed according to DIN 41 091.

#### Hands

Black bar-type hour and minute hands, red second hand.

No second hands on minute pulse 12... 60 V controlled slave clocks.

#### LED digital display

6-digit 7-segment LED bars, digit colour red (option: amber or green). Digit height 25 mm. Automatic brightness control. Power supply is 230 VAC mains as standard, 12 V DC (option). Power loss reserve: Time telegram/pulse storage to cover cir. 100 hours.

#### Stopwatch mode

The 6-digit display will show hours, minutes and seconds, counting up from start. The stopwatch system is controlled by a remote control unit (as an extra), for technical data see page 110.

#### Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.

Mounting dimensions		for stud-and-panel walls
clock case (width x height)	cir. 301 x 387 mm	cir. 301 x 387 mm
wall breakout (width x height)	cir. 301 x 387 mm	cir. 282 x 362 mm
depth	cir. 81 mm	cir. 78 mm

Technical data		
Analog face	print diameter	cir. 235 mm
	face dimensions	cir. 270 x 270 mm
Digit height	digital display	25 mm
Electrical values	operating voltage for digital display	230 VAC
	optional operating voltage for digital display	12 VDC
	power consumption LED display	cir. 9 VA

Clock type	DIN bars Item No.	€ each	fine-line Item No.	€ each
DCF77 radio controlled clock, mains op. 230 VAC <sup>1)</sup>	52. <b>480</b> .320		52. <b>480</b> .330	1,695
Slave clock, minute pulse 1260 V	71. <b>480</b> .320	1,490	71. <b>480</b> .330	1,490
Slave clock, minute/second pulse 12/24 V	72. <b>480</b> .320	1,715	72. <b>480</b> .330	1,715
Slave clock, minute/second pulse 12/24 V, extra low noise motion	73. <b>480</b> .320	1,855	73. <b>480</b> .330	1,855
Slave clock, minute pulse 12/24 V, synch. second hand 230 VAC/50 Hz	74. <b>480</b> .320	1,900	74. <b>480</b> .330	1,900
Slave clock, second pulse 12/24 V, with creeping minute hand	75. <b>480</b> .320	1,875	75. <b>480</b> .330	1,875
Telegram slave clock, DCFport24, 12/24 V	81. <b>480</b> .320	1,530	81. <b>480</b> .330	1,530
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>480</b> .320	1,694	85. <b>480</b> .330	1,694
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>480</b> .320	1,679	91. <b>480</b> .330	1,679

Mounting kits (please order one frame or kit per clock)	Item No.	€ each
Metal mounting frame (width x height x depth: cir. 301 x 387 x 78 mm) for in-wall mounting in conventional brick walls	01. <b>480</b> .300	none
Mounting kit for stud-and-panel walls (spring-clip attachment device/no mounting frame required)	01. <b>480</b> .301	none
Case for on-wall mounting (stainless steel V4A)	01. <b>480</b> .302	295
Assessments	14 NI -	€ each
Accessories	Item No.	€ eacn
Remote control w. mounting frame for in-wall mounting, stainless steel V4A	02. <b>498</b> .100	795
Remote control for stud-and-panel wall mounting by means of spring clip	02.498.101	795

Options	Suffix	Surcharge € each
Front glass of analog clock treated for low reflectivity	-49	49
Mains adapter 12 V DC for LED digital display	-70	none
Amber (instead of red) digital display	-78	on request
Green (instead of red) digital display	-79	on request
Date display during inactivity of stopwatch mode	-81	on request

attachment device, stainless steel V4A (no mounting frame required)



Indoor analog/digital flush-mounted





















#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

795.-

02.498.102

Hand-held remote control, stainless steel V4A

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by



# **LED Digital Clocks for In-Wall Mounting**

with stopwatch mode (optional), ideal for surgical operating rooms



Indoor digital flush-mounted



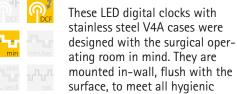












Configured in this type of case or in any other case adapted to customer's wishes, e.g.

- for on-wall mounting,
- for desk-top use or
- as a double faced clock, these clocks can be used in any demanding environment, such as the pharmaceutical, beverage and food industries, requiring accurate and dependable time information.





Double faced clock with ceiling bracket, stainless steel V4A





For operating the stopwatch mode (option) we provide different remote control units in stainless steel cases. For a detailed product description please see page 110.





### Case

cir. 455 x 150 mm,

very high grade stainless steel case (1.4571 X6CrNiMoTi 17-12-2, German trade name V4A), for mounting flush with wall tiles or plaster. Visible surface with a matted finish, resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54 (EN 60 529).

### Mounting

- built-in/plaster
- in stud-and-panel wall
- on-wall mounting (optional)
- double faced clocks may be suspended from the ceiling on brackets (optional).

A metal mounting frame for conventional brick walls or a spring-clip device for stud-and-panel walls is supplied with the clock. Optionally, at a surcharge, the clock may also be configured for on-wall mounting or as a double faced version.

### **LED** digital display

6-digits, 2 each for hours, minutes and seconds. 7-segment LED bars, red as standard, amber or green as options. Digit height 57 mm for hour, minute and second. Second digit height 38 mm as an option. Automatic brightness control. Readability is excellent even at extremely sharp angles.

### Front glass

Flat mineral glass, 3 mm, treated for low reflectivity.

### **Power supply**

230 VAC/50 Hz is standard, 12 VDC mains is optional. Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2). Existing 2-wire or 4-wire slave clock bus lines may be re-used for 12 VDC or PEWETA DCFport24 versions.

### Stopwatch mode (optional)

These clocks can be fitted with a count up/split time stopwatch mode. The 6-digit LED display will show hours, minutes and seconds, counting up from start. The stopwatch system is controlled by a wire-based remote control unit (as an extra), for technical data see page 110.

### Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.

Mounting dimensions	with mounting frame	for stud-and-panel walls
clock case (width x height)	cir. 455 x 150 mm	cir. 455 x 150 mm
wall breakout (width x height)	cir. 455 x 150 mm	cir. 426 x 138 mm
depth	cir. 73 mm	cir. 60 mm

Technical data		
Digit height	hour, minute, second	57 mm
	second (option)	38 mm
Electrical values	operating voltage	230 VAC
	operating voltage (option)	12 VDC
	power consumption	cir. 9 VA
	power losss reserve	cir. 100 hours.

Clock type	Operating voltage	Item No.	€ each
Quartz clock (in connection with PEWETA data bus RS485 master or slave option only)	230 VAC	42. <b>490</b> .550	1,309.–
DCF77 radio controlled clock <sup>1)</sup>	230 VAC	52. <b>490</b> .550	1,469
Slave clock, minute pulse 24 V	230 VAC	71. <b>490</b> .550	1,399
Telegram slave clock, DCFport24, 24 V <sup>2)</sup>	DCFport24	81. <b>490</b> .550	1,399
Telegram slave clock, DCFport24, 12/24 V	230 VAC	83. <b>490</b> .550	1,399
RC telegram slave clock, AirPort24, with outage reserve	230 VAC	85. <b>490</b> .550	1,509
NTP system clock (NTP client), synchronisation by LAN <sup>1)3)</sup>	PoE	91. <b>490</b> .550	1,459
NTP system clock (NTP client), synchronisation by LAN <sup>1)4)</sup>	230 VAC	93. <b>490</b> .550	1,489

Mounting kits (please order one frame or kit	per clock)	Item No.	€ each
Metal mounting frame (width x height x dept for in-wall mounting in conventional brick wa		01. <b>490</b> .500	none
Mounting kit for stud-and-panel walls (spring-clip attachment device/no mounting f		01. <b>490</b> .501	none
Case for on-wall mounting (stainless steel V4.	A)	01. <b>490</b> .502	295
Bracket for ceiling mounting of two single clo	cks (stainless steel V4A)	01. <b>490</b> .503	295

Accessories	Item No.	€ each
Remote control w. mounting frame for in-wall mounting, stainless steel V4A	02. <b>498</b> .100	795
Remote control for stud-and-panel wall mounting by means of spring clip attachment device, stainless steel V4A (no mounting frame required)	02. <b>498</b> .101	795.–
Hand-held remote control, stainless steel V4A	02. <b>498</b> .102	795

Options	Suffix	Surcharge € each
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Stopwatch mode (remote control unit is an extra)	-71	169
Amber (instead of red) LED digital display (57 mm digit height second only)	-78	69
Green (instead of red) LED digital display (57 mm digit height second only)	-79	125
Date indication alternating with time indication	-81	on request
PEWETA data bus RS485 master (output)	-82	100
PEWETA data bus RS485 slave (input)	-83	100
Alternating temperature indication (external temperature sensor included)	-88	295
Second digit height 38 mm (instead of 57 mm)	-89	none
GPS version, incl. GPS receiving aerial (IP 65/EN 60 529)	-95	695



Indoor digital flush-mounted

























clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).



<sup>1)</sup> A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

<sup>2)</sup> Limited number of clocks within a system/ network.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by



## **Remote Control**

ideally suited for surgical operating room in-wall clocks (digital or analog/digital)



Remote control flush-mounted or hand-held

Type series 498









These control units (wire-bound remote controls) were specially developed for use in hospital surgical operating rooms – flush with wall tiles, no hygienic limitations, reliable and accurate!

Also usable in other clean-room environments, such as pharmaceutical, beverage or food industries.

### Case

Flush-with-tiles/wall surface stainless steel V4A (1.4571 X6CrNiMoTi 17-12-2) mounting frame for in-wall mounting, visible surfaces with a matted finish (K240), specially resistant to acids, detergents and disinfectants. In mounted condition protected against dust and moisture to IP 54 (EN 60 529).

### Mounting

- built-in/plaster
- in stud-and-panel wall
- hand-held

The built-in version is supplied with either a mounting frame for mounting in conventional brick-and-plaster walls or a spring clip attachment device for stud-and-panel walls. A hand-held version is also available. For dimensions please see table.

### **Functions**

- switching between clock and stopwatch function
- start/stop (counting upwards)
- split times
- reset

When used with PEWETA LED-OP-in-wall clocks, no separate power supply is required. Connected to clock by 4-core-wire, such as LIYCY-0 4x0.25 mm² (standard length of cir. 5 m is supplied with control unit).



Mounting dimensions	02. <b>498</b> .100	02. <b>498</b> .101
wall breakout (width x height)	cir. 150 x 150 mm	cir. 135 x 125 mm
space required for spring clips (width)	not applicable	cir. 250 mm
front panel (width x height)	cir. 150 x 150 mm	cir. 150 x 150 mm
minimum depth without mounting frame	37.5 mm	34.5 mm

Dimensions	02. <b>498</b> .102
width x height x depth	cir. 43 x 125 x 25 mm
weight	cir. 250 g

If interested please ask for data and dimension sheet.

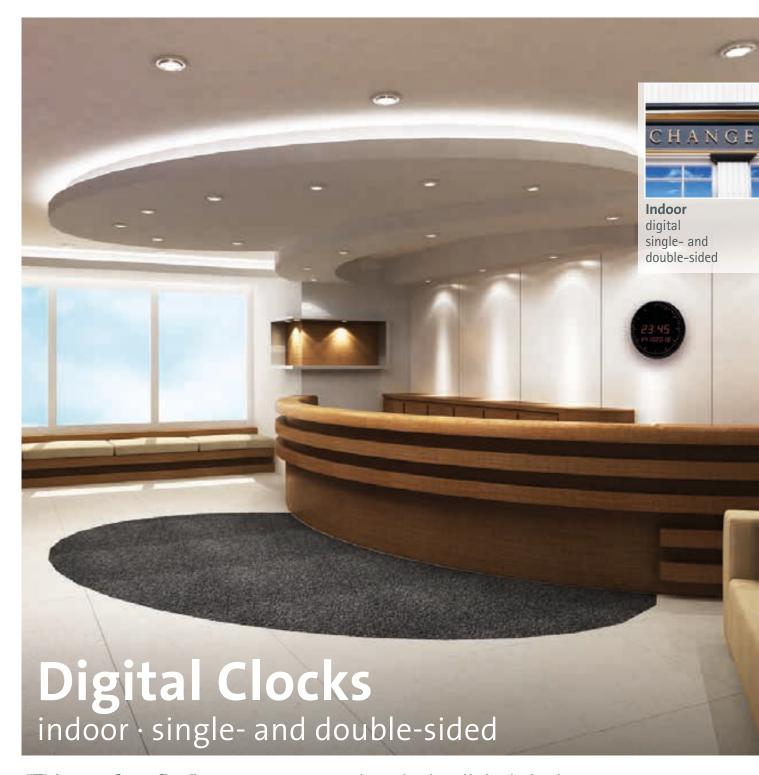
Туре	Item No.	€ each
Remote control with mounting frame for in-wall mounting, stainless steel V4A	02. <b>498</b> .100	795.–
Remote control for stud-and-panel wall mounting by means of spring clip attachment device, stainless steel V4A (no mounting frame required)	02. <b>498</b> .101	795.–
Hand-held remote control, stainless steel V4A	02.498.102	795



### Stainless steel V4A

Due to its components stainless steel V4A is not only completely impervious to detergents and disinfectants but also to acids and other aggressive media. The flush-mounted clocks of this type series are therefore particularly suited for the use surgical operating rooms and other clean rooms.





"Thirteen fortyfive" — contrary to analog clocks, digital clocks soundlessly indicate the time in a 24-hour mode.

This is particularly recommended for radio stations and TV studios, in world time clock systems and for places of high publicity, e. g. bank areas — locations where exact time should be shown in combination with the date.



for offices, production areas, and places of high publicity



Indoor digital single- and double-sided























LED digital clocks, single- or double-sided with distinct, brightly lit LED bars guarantee optimal reading clearness.



### LED digital display

cipher height 57 mm

cipher height 100 mm Single line display showing hours and minutes, 4 digits, bar-type 7-segment LED ciphers, colour red (optionally amber, green or blue at a surcharge). Automatic brightness control. Menu selection for hour offset and suppression of leading zero. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/AC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).



Front glass Flat acrylic glass.

### Mounting

Case

cir. 320 x 150 x 34 mm (cipher height 57 mm)

cir. 520 x 250 x 43 mm

(cipher height 100 mm)

Extra flat, very sturdy metal case, enamelled black (RAL 9005).

Protection grade IP 40 (EN 60529).

- Single-sided version for on-wall mounting, optionally with an additional, sturdy wall or ceiling mounting bracket (accessory)
- Double-sided version includes sturdy wall or ceiling mounting bracket.

### Double-sided LED digital clocks Double-sided clocks come completely

wired and assembled. All settings will be taken over by both

sides automatically!



Technical data			Cipher heig	ght 57 mm	Cipher heig	ht 100 mm
Case	colour		black	(RAL 9005)	black	(RAL 9005)
	dimensions (length x width x depth)		cir. 320 x 1	50 x 34 mm	cir. 520 x 2	50 x 43 mm
Display	cipher height hours, minutes			cir. 57 mm		cir. 100 mm
	reading distance			cir. 20 m		cir. 40 m
Power consumption	display			max. 5 VA		max. 6 VA
		Cipher height ▶	57 mm		100 mm	
Single-sided version	(on-wall mounting)	Operating voltage ▼		€ each	Item No.	€ each
Quartz clock		230 VAC	42. <b>510</b> .551	660	42. <b>510</b> .951	1,110
DCF77 radio controlled	clock 1)	230 VAC	52. <b>510</b> .551	820	52. <b>510</b> .951	1,270
Slave clock, minute pul	se 24 V	230 VAC	71. <b>510</b> .551	750	71. <b>510</b> .951	1,200
Telegram slave clock, D	CFport24 <sup>2)</sup>	DCFport24	81. <b>510</b> .551	750	81. <b>510</b> .951	1,200
Telegram slave clock, D	CFport24, 12/24 V	230 VAC	83. <b>510</b> .551	750	83. <b>510</b> .951	1,200
RC telegram slave clock	k, AirPort24	230 VAC	85. <b>510</b> .551	860	85. <b>510</b> .951	1,310
NTP system clock (NTP	client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>510</b> .551	810	91. <b>510</b> .951	1,260

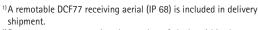
230 VAC 93.**510**.551

**840.-** 93.**510**.951

, , , , , , , , , , , , , , , , , , , ,					•
	Cipher height ▶			100 mm	
<b>Double-sided version</b> (incl. wall and ceiling mounting bracket respectively)	Mounting ▼	Item No.	€ each	Item No.	€ each
Quartz clock,	wall	42. <b>510</b> .552	1,480	n	ot available
operating voltage 230 VAC	ceiling	42. <b>510</b> .553	1,480	42. <b>510</b> .953	2,380
DCF77 radio controlled clock,	wall	52. <b>510</b> .552	1,640	n	ot available
operating voltage 230 VAC 1)	ceiling	52. <b>510</b> .553	1,640	52. <b>510</b> .953	2,540
Slave clock, minute pulse 24 V,	wall	71. <b>510</b> .552	1,570	n	ot available
operating voltage 230 VAC	ceiling	71. <b>510</b> .553	1,570	71. <b>510</b> .953	2,470
Telegram slave clock, DCFport24,	wall	81. <b>510</b> .552	1,570	n	ot available
operating voltage DCFport24 <sup>2)</sup>	ceiling	81. <b>510</b> .553	1,570	81. <b>510</b> .953	2,470
Telegram slave clock, DCFport24,	wall	83. <b>510</b> .552	1,570	n	ot available
operating voltage 230 VAC	ceiling	83. <b>510</b> .553	1,570	83. <b>510</b> .953	2,470
RC telegram slave clock, AirPort24,	wall	85. <b>510</b> .552	1,680	n	ot available
operating voltage 230 VAC	ceiling	85. <b>510</b> .553	1,680	85. <b>510</b> .953	2,580
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup> ,	wall	91. <b>510</b> .552	1,630	n	ot available
operating voltage 230 VAC	ceiling	91. <b>510</b> .553	1,630	91. <b>510</b> .953	2,530
NTP system clock (NTP client), synchronisation by LAN 4),	wall	93. <b>510</b> .552	1,660	n	ot available
operating voltage 230 VAC	ceiling	93. <b>510</b> .553	1,660	93. <b>510</b> .953	2,560

Accessories	Item No.	€ each
Mounting bracket for 1 single-sided clock, on wall, bracket length cir. 125 mm (for LED clocks with 57 mm cipher height only)	01. <b>510</b> .502	189
Mounting bracket for 1 single-sided clock, on ceiling, bracket length cir. 130 mm	01. <b>510</b> .503	189
Metal cover for wall or ceiling mounting bracket	01. <b>510</b> .537	125

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Amber LEDs (57 mm cipher height only, surcharge per display/side)	-78	49
Green LEDs (57 mm cipher height only, surcharge per display/side)	-79	89
Blue LEDs (57 mm cipher height only, surcharge per display/side)	-80	89
Alternating date display	-81	on request
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60 529)	-95	695



NTP system clock (NTP client), synchronisation by LAN 4)



Indoor digital single- and double-sided

1,290.-



















clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

PEWETA AirPort 24 PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).



<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/ network is limited. Please ask for details when interested.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.



for offices, production areas, and places of high publicity



Indoor digital single- and double-sided

























LED digital clocks, single- or double-sided with distinct, brightly lit LED bars guarantee optimal reading clearness.



- cir. 440 x 150 x 34 mm (cipher height 57 mm)
- cir. 770 x 250 x 43 mm (cipher height 100 mm) Extra flat, very sturdy metal case, enamelled black (RAL 9005). Protection grade IP 40 (EN 60529).

### Mounting

Case

- Single-sided version for on-wall mounting, optionally with an additional, sturdy wall or ceiling mounting bracket (accessory)
- Double-sided version includes sturdy wall or ceiling mounting bracket.

### LED digital display

- cipher height 57 mm (option: 38 mm for seconds)
- cipher height 100 mm

Single line display showing hours, minutes and seconds, 6-digits, bar-type 7-segment LED ciphers, colour red (optionally amber, green or blue at a surcharge). Automatic brightness control. Menu selection for hour offset and suppression of leading zero. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/AC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).



### Stopwatch mode (option)

These clocks can be fitted with an additional stopwatch mode (count-up/ count-down). This mode is controlled by a wire-bound »Basic PRO« control unit (accessory). For technical details see page 133.

### Front glass Flat acrylic glass.

Double-sided LED digital clocks Double-sided clocks come completely wired and assembled. All settings will be taken over by both sides automatically!



Technical data			Cipher heig	ght 57 mm	Cipher heig	ht 100 mm	
Case	colour		black	(RAL 9005)	black	(RAL 9005)	
	dimensions (length x width x depth)		cir. 440 x 1	50 x 34 mm	cir. 770 x 2	250 x 43 mm	State of the late of the late of
Display	cipher height hours, minutes, seconds			cir. 57 mm		cir. 100 mm	
	reading distance			cir. 20 m		cir. 40 m	and the same
Power consumption	display			max. 5 VA		max. 6 VA	
		Cipher height ▶			100 mm		1
Single-sided version (	on-wall mounting)	Operating voltage ▼			Item No.	€ each	
Quartz clock			42. <b>511</b> .551		42. <b>511</b> .951	1,360	Indoor
DCF77 radio controlled			52. <b>511</b> .551		52. <b>511</b> .951	1,520	digital
Slave clock, minute puls			71. <b>511</b> .551		71. <b>511</b> .951	1,450	single- and
Telegram slave clock, DO			81. <b>511</b> .551		81. <b>511</b> .951	1,450	double-sided
Telegram slave clock, DO			83. <b>511</b> .551		83. <b>511</b> .951	1,450	
RC telegram slave clock			85. <b>511</b> .551		85. <b>511</b> .951	1,560	Type series
	client), synchronisation by LAN, PoE <sup>3)</sup>		91. <b>511</b> .551		91. <b>511</b> .951	1,510	511
NTP system clock (NTP o	client), synchronisation by LAN 4)	230 VAC	93. <b>511</b> .551	930	93. <b>511</b> .951	1,540	
	<i>.</i>	Cipher height ▶	57 mm	- 1	100 mm	- 1	2 230V Quartz Qu
	(incl. wall and ceiling mounting bracket respe				Item No.	€ each	
Quartz clock, operating voltage 230 V	/AC		42. <b>511</b> .552 42. <b>511</b> .553	1,660	42. <b>511</b> .953	ot available 2,990.–	101 61 6
DCF77 radio controlled			52. <b>511</b> .552	1,880		ot available	DCF
operating voltage 230 V			52. <b>511</b> .553	•	52. <b>511</b> .953	3,150	t /
Slave clock, minute puls			71. <b>511</b> .552	1,750		ot available	
operating voltage 230 V		ceiling	71. <b>511</b> .553		71. <b>511</b> .953	3,080	DCF HIIII
Telegram slave clock, DO		wall	81. <b>511</b> .552	1,750	n	ot available	gar am an
operating voltage DCFpo		,	81. <b>511</b> .553		81. <b>511</b> .953	3,080	
Telegram slave clock, <i>DO</i> operating voltage 230 V	'AC		83. <b>511</b> .552 83. <b>511</b> .553	1,750 1,750		ot available 3,080	DCFport DCFport Air
RC telegram slave clock operating voltage 230 V			85. <b>511</b> .552 85. <b>511</b> .553	1,860 1,860	85. <b>511</b> .953	ot available 3,190.–	AirPort NTP NI
NTP system clock (NTP coperating voltage 230 V	client), synchronisation by LAN, PoE <sup>3)</sup> , AC		91. <b>511</b> .552 91. <b>511</b> .553	1,810 1,810	91. <b>511</b> .953	ot available 3,140	PoE
	client), synchronisation by LAN <sup>4)</sup> ,		93. <b>511</b> .552	1,840		ot available	DCF77 radio controlled
operating voltage 230 V	AC	ceiling	93. <b>511</b> .553	1,840.–	93. <b>511</b> .953	3,170.–	clocks DCF77 radio controlled clos
A		Cipher height ►		e anala	100 mm	C anala	of this type series will be su plied including a remotable
Accessories  Mounting bracket for 1	single-sided clock, on wall, bracket length o	rir 125 mm	Item No. 01. <b>511</b> .502	189	Item No.	€ each ot available	DCF77 aerial (IP 68). Thus,
•	or 1 single-sided clock, on ceiling, bracket le		01. <b>511</b> .502		01. <b>511</b> .903	378	optimum reception quality
-	or ceiling mounting bracket(s)	ingth Ch. 130 mm	01. <b>511</b> .503		01. <b>511</b> .503	250	can be achieved regardless of the final placement of the
	isic PRO" for stopwatch function, PEWETA a	ligital BS195 version 6)	43. <b>548</b> .251		43. <b>548</b> .251	1,250	clock itself. However, DCF7
	isic PRO" for stopwatch function, $\Gamma$ EWETA basic PRO" for stopwatch function, NTP/PoE v		91. <b>548</b> .251		91. <b>548</b> .251	1,290	radio controlled clocks will
nemote control unit. Da	isic i no ioi stopwaten function, wii ji oz v	CISIOII ·	91. <b>340</b> .231	1,250	91.346.231		only function correctly with a radius of approx. 1,500 ki
Options					Suffix	Surcharge € each	around Mainflingen (50 km
Case custom enamelled					-10	on request	east of Frankfurt/M.).
	DC (instead of 230 VAC)				-70	none	PEWETA DCFport24 PEWETA DCFport24 slave
	t-up/count-down« (control unit is an access	ory)			-71	169	clocks require a PEWETA
	her height only, surcharge per display/side)	,			-78	69	master clock (see from
, ,	ner height only, surcharge per display/side)				-79	125	page 172 on).
	er height only, surcharge per display/side)				-80	125	PEWETA AirPort24
Alternating date display					-81	on request	PEWETA AirPort24 slave clo require an AirPort24 trans-
DELAUETA II II LDC 105	, ( , , )					100	mitter or reneater respectiv



<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial (IP 68) is included in delivery shipment.

Alternating temperature display (external temperature sensor included)

PEWETA digital RS 485 master (output)

PEWETA digital RS 485 slave (input)

Tableston Library







require an AirPort24 transmitter or repeater respectively (see page 177).

100.-

100.-

295.-

-82

-83

-88



<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/network is limited. Please ask for details when interested.

a) NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>5)</sup> For LED digital clocks with 100 mm cipher height, 2 mounting brackets per clock will always be supplied.

<sup>&</sup>lt;sup>6)</sup>Works with LED digital clocks including the *PEWETA digital RS485* »master« option only.

<sup>&</sup>lt;sup>7)</sup>Works with NTP system clock (NTP client) clock types only..



## **LED Digital Calendar Clocks**

for banks, reception areas, and other places of high publicity



Indoor digital single- and double-sided





















LED digital clocks, single- or double-sided, with distinct, brightly lit LED bars guarantee optimal reading clearness.

cir. 670 x 150 x 34 mm Extra flat, very sturdy metal case, enamelled black (RAL 9005). Protection grade IP 40 (EN 60 529).

### Mounting

- Single-sided version for on-wall mounting, optionally with additional, sturdy ceiling mounting brackets (accessory)
- Double-sided version includes sturdy ceiling mounting brackets.

### **LED digital display**

Single line display showing 10-character alphanumeric date, character height 30 mm, adjustable to various date formats, and numeric time, 4 digits for hours and minutes, cipher height 57 mm. Reading distance cir. 18..20 m. Bar-type 7-segment LED ciphers and 16-segment LED characters, respectively, colour red. Automatic brightness control. Menu selection for hour offset and suppression of leading zero. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/AC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).

Front glass Flat acrylic glass.

Double-sided LED digital clocks Double-sided clocks come completely wired and assembled.





Various date formats are adjustable by menu



City name displayed when the clock is part of a World Time Clock system





Technical data		
Case	colour	black (RAL 9005)
	dimensions (length x width x depth)	cir. 670 x 150 x 34 mm
Display	cipher height hour/minute	cir. 57 mm
	cipher height date	cir. 30 mm
	reading distance	cir. 1820 m
Power consumption	display	max. 5 VA
	One and the	

	Operating		
Single-sided version (on-wall mounting)	voltage	Item No.	€ each
Quartz clock	230 VAC	42. <b>512</b> .551	1,250
DCF77 radio controlled clock 1)	230 VAC	52. <b>512</b> .551	1,410
Slave clock, minute pulse 24 V	230 VAC	71. <b>512</b> .551	1,340
Telegram slave clock, DCFport24 <sup>2)</sup>	DCFport24	81. <b>512</b> .551	1,340
Telegram slave clock, DCFport24, 12/24 V	230 VAC	83. <b>512</b> .551	1,340
RC telegram slave clock, AirPort24	230 VAC	85. <b>512</b> .551	1,450
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>512</b> .551	1,400
NTP system clock (NTP client), synchronisation by LAN <sup>4)</sup>	230 VAC	93. <b>512</b> .551	1,430

Double-sided version (on-wall mounting)	Operating voltage	Item No.	€ each
Quartz clock	230 VAC	42. <b>512</b> .553	2,800
DCF77 radio controlled clock 1)	230 VAC	52. <b>512</b> .553	2,960
Slave clock, minute pulse 24 V	230 VAC	71. <b>512</b> .553	2,890
Telegram slave clock, DCFport24 <sup>2)</sup>	DCFport24	81. <b>512</b> .553	2,890
Telegram slave clock, DCFport24, 12/24 V	230 VAC	83. <b>512</b> .553	2,890
RC telegram slave clock, AirPort24	230 VAC	85. <b>512</b> .553	3,000
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3</sup>	PoE	91. <b>512</b> .553	2,950
NTP system clock (NTP client), synchronisation by LAN 4)	230 VAC	93. <b>512</b> .553	2,980

Accessories	Item No.	€ each
Mounting brackets for 1 single-sided clock, on ceiling, bracket length cir. 130 mm	01. <b>512</b> .503	378
Metal covers for wall or ceiling mounting brackets	01. <b>515</b> .537	250

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
City pre-sets for World Time Clock Systems	-75	139
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60529)	-95	695



Indoor digital single- and double-sided



















### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/ network is limited. Please ask for details when interested.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.



## **LED Digital Calendar Clocks**

for banks, reception areas, and other places of high publicity



Indoor digital single- and double-sided

514























LED digital clocks, single- or double-sided with distinct, brightly lit LED bars guarantee optimal reading clearness.





cir. 440 x 250 x 34 mm Extra flat, very sturdy metal case, enamelled black (RAL 9005). Protection grade IP 40 (EN 60529).

### Mounting

- Single-sided version for on-wall mounting, optionally with additional, sturdy wall or ceiling mounting brackets (accessory)
- Double-sided version includes sturdy wall or ceiling mounting brackets.

### LED digital display

2-line display, top line showing hours and minutes, cipher height 57 mm, (optional seconds: cipher height 57 mm or 38 mm), bottom line showing 10-character alphanumeric date, character height 30 mm. Bar-type 7-segment LED ciphers and 16-segment LED characters, respectively, colour red. Automatic brightness control. Menu selection for hour offset and suppression of leading zero. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/AC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).



Front glass Flat acrylic glass.

Double-sided LED digital clocks Double-sided clocks come completely wired and assembled.





Technical data		
Case	colour	black (RAL 9005)
	dimensions (length x width x depth)	cir. 440 x 250 x 34 mm
LED Display	cipher height hours, minutes	cir. 57 mm
	cipher height date	cir. 30 mm
	cipher height seconds (option)	cir. 38 or 57 mm
	reading distance	cir. 1820 m
Power consumption	display	max. 5 VA
	On and the	

	Operating		
Single-sided version (on-wall mounting)	voltage	Item No.	€ each
Quartz clock	230 VAC	42. <b>514</b> .551	1,250
DCF77 radio controlled clock 1)	230 VAC	52. <b>514</b> .551	1,410
Slave clock, minute pulse 24 V	230 VAC	71. <b>514</b> .551	1,340
Telegram slave clock, DCFport24 <sup>2)</sup>	DCFport24	81. <b>514</b> .551	1,340
Telegram slave clock, DCFport24, 12/24 V	230 VAC	83. <b>514</b> .551	1,340
RC telegram slave clock, AirPort24	230 VAC	85. <b>514</b> .551	1,450
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>514</b> .551	1,400
NTP system clock (NTP client), synchronisation by LAN 4)	230 VAC	93. <b>514</b> .551	1,430

Double-sided version (incl. wall or ceiling mounting brackets)	Mounting	Item No.	€ each
Quartz clock,	wall	42. <b>514</b> .552	2,800
operating voltage 230 VAC	ceiling	42. <b>514</b> .553	2,800
DCF77 radio controlled clock,	wall	52. <b>514</b> .552	2,960
operating voltage 230 VAC <sup>1)</sup>	ceiling	52. <b>514</b> .553	2,960
Slave clock, minute pulse 24 V,	wall	71. <b>514</b> .552	2,890
operating voltage 230 VAC	ceiling	71. <b>514</b> .553	2,890
Telegram slave clock, DCFport24,		81. <b>514</b> .552	2,890
operating voltage DCFport24 <sup>2)</sup>	ceiling	81. <b>514</b> .553	2,890
Telegram slave clock, DCFport24,		83. <b>514</b> .552	2,890
operating voltage 230 VAC		83. <b>514</b> .553	2,890
RC telegram slave clock, <i>AirPort24</i> ,		85. <b>514</b> .552	3,000
operating voltage 230 VAC		85. <b>514</b> .553	3,000
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3</sup> ,		91. <b>514</b> .552	2,950
operating voltage 230 VAC		91. <b>514</b> .553	2,950
NTP system clock (NTP client), synchronisation by LAN 4),		93. <b>514</b> .552	2,980
operating voltage 230 VAC	ceiling	93. <b>514</b> .553	2,980

Accessories	Item No.	€ each
Mounting brackets for 1 single-sided clock, on wall, bracket length cir. 125 mm	01. <b>514</b> .502	378
Mounting brackets for 1 single-sided clock, on ceiling, bracket length cir. 130 mm	01. <b>514</b> .503	378
Metal covers for wall or ceiling mounting brackets	01. <b>515</b> .537	250

		Surcharge
Options	Suffix	€ each
Case custom enamelled	-10	on request
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Additional 2-digit seconds display, height 38 or 57 mm	-74	169
City pre-sets for World Time Clock Systems	-75	139
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60529)	-95	695



**Indoor** digital single- and double-sided

Type series **514** 

























## DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

### NTP

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/ network is limited. Please ask for details when interested.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.



## **LED Digital Calendar Clocks**

for banks, reception areas, and other places of high publicity



Indoor digital single- and double-sided

























LED digital clocks, single- or double-sided with distinct, brightly lit LED bars guarantee optimal reading clearness.



### Case

cir. 440 x 300 x 34 mm Extra flat, very sturdy metal case, enamelled black (RAL 9005). Protection grade IP 40 (EN 60529).

### Mounting

- Single-sided version for on-wall mounting, optionally with additional, sturdy wall or ceiling mounting brackets (accessory)
- Double-sided version includes sturdy wall or ceiling mounting brackets.

### LED digital display

2-line numeric display, top line showing hours and minutes, cipher height 57 mm (optional seconds: cipher height 57 mm or 38 mm), bottom line showing 8-digit numeric date, cipher height 45 mm, readable from 18...20 m distance. All ciphers are bar-type 7-segment LED, colour red. Automatic brightness control. Menu selection for hour offset and suppression of leading zero. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC /AC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks<sup>2)</sup>.



Front glass Flat acrylic glass.

Double-sided LED digital clocks Double-sided clocks come completely wired and assembled.



Technical data		
Case	colour	black (RAL 9005)
	dimensions (length x width x depth)	cir. 440 x 300 x 34 mm
Display	cipher height hours, minutes	cir. 57 mm
	cipher height date	cir. 45 mm
	cipher height seconds (option)	cir. 38 or 57 mm
	reading distance	cir. 1820 m
Power consumption	display	max. 5 VA
	On small to a	

Operating		
voltage	Item No.	€ each
230 VAC	42. <b>515</b> .551	1,240
230 VAC	52. <b>515</b> .551	1,400
230 VAC	71. <b>515</b> .551	1,330
DCFport24	81. <b>515</b> .551	1,330
230 VAC	83. <b>515</b> .551	1,330
230 VAC	85. <b>515</b> .551	1,440
PoE	91. <b>515</b> .551	1,390
230 VAC	93. <b>515</b> .551	1,420
	voltage 230 VAC 230 VAC 230 VAC <i>DCFport24</i> 230 VAC 230 VAC PoE	Operating voltage 230 VAC 42.515.551 230 VAC 52.515.551 230 VAC 71.515.551 DCFport24 81.515.551 230 VAC 83.515.551 230 VAC 85.515.551 PoE 91.515.551 230 VAC 93.515.551

Double-sided version (incl. wall or ceiling mounting brackets)	Mounting	Item No.	€ each
Quartz clock,		42. <b>515</b> .552	2,780
operating voltage 230 VAC		42. <b>515</b> .553	2,780
DCF77 radio controlled clock,	wall	52. <b>515</b> .552	2,940
operating voltage 230 VAC <sup>1)</sup>	ceiling	52. <b>515</b> .553	2,940
Slave clock, minute pulse 24 V,	wall	71. <b>515</b> .552	2,870
operating voltage 230 VAC	ceiling	71. <b>515</b> .553	2,870
Telegram slave clock, DCFport24,	wall	81. <b>515</b> .552	2,870
operating voltage DCFport24 <sup>2)</sup>	ceiling	81. <b>515</b> .553	2,870
Telegram slave clock, DCFport24,	wall	83. <b>515</b> .552	2,870
operating voltage 230 VAC	ceiling	83. <b>515</b> .553	2,870
RC telegram slave clock, AirPort24,		85. <b>515</b> .552	2,980
operating voltage 230 VAC	ceiling	85. <b>515</b> .553	2,980
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3</sup> ,		91. <b>515</b> .552	2,930
operating voltage 230 VAC		91. <b>515</b> .553	2,930
NTP system clock (NTP client), synchronisation by LAN 4),		93. <b>515</b> .552	2,960
operating voltage 230 VAC	ceiling	93. <b>515</b> .553	2,960

Accessories	Item No.	€ each
Mounting brackets for 1 single-sided clock, on wall, bracket length cir. 125 mm	01. <b>515</b> .502	378
Mounting brackets for 1 single-sided clock, on ceiling, bracket length cir. 130 mm	01. <b>515</b> .503	378
Metal covers for wall or ceiling mounting brackets	01. <b>515</b> .537	250

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Additional 2-digit seconds display, height 38 or 57 mm	-74	169
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60 529)	-95	695



Indoor digital single- and double-sided





















### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/ network is limited. Please ask for details when interested.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.



## **LED Digital Calendar Clocks**

for banks, reception areas, and other places of high publicity



Indoor digital single- and double-sided





















LED digital clocks, single- or double-sided with distinct, brightly lit LED bars guarantee optimal reading clearness.



### Case

cir. 440 x 300 x 34 mm Extra flat, very sturdy metal case, enamelled black (RAL 9005). Protection grade IP 40 (EN 60529).

### Mounting

- Single-sided version for on-wall mounting, optionally with additional, sturdy wall or ceiling mounting brackets (accessory)
- Double-sided version includes sturdy wall or ceiling mounting brackets.

### LED digital display

3-line display, top line showing hours and minutes, cipher height 57 mm, (optional seconds: cipher height 57 mm or 38 mm), middle line showing day of the week spelled out (up to 10 characters, character height 30 mm), bottom line showing 8-digit numeric date, cipher height 45 mm. Bar-type 7-segment LED ciphers, resp. 16-segment LED characters, colour red. Automatic brightness control. Menu selection for hour offset and suppression of leading zero. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/AC optional). Under specific circumstances,



the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).

Front glass Flat acrylic glass.

Double-sided LED digital clocks Double-sided clocks come completely wired and assembled.



Technical data				
Case	colour		black	(RAL 9005)
	dimensions (length x width x depth)		cir. 440 x 30	00 x 34 mm
Display	cipher height hours, minutes			cir. 57 mm
	cipher height date			cir. 45 mm
	cipher height day of week			cir. 30 mm
	cipher height seconds (option)		cir. 38	3 or 57 mm
	reading distance		ci	r. 1820 m
Power consumption	display			max. 5 VA
		0		
Single-sided version	(on-wall mounting)	Operating	Item No.	€ each
Quartz clock	ton-wan mounting)		42. <b>516</b> .551	1,500
DCF77 radio controlled	clock 1)		52. <b>516</b> .551	1,660
Cl. I did controlled			32.310.331	1,000

Operating
voltage Item No. € each
230 VAC 42. <b>516</b> .551 <b>1,500.</b> -
230 VAC 52. <b>516</b> .551 <b>1,660.–</b>
230 VAC 71. <b>516</b> .551 <b>1,590.</b> -
DCFport24 81. <b>516</b> .551 <b>1,590.</b> -
230 VAC 83. <b>516</b> .551 <b>1,590.–</b>
230 VAC 85. <b>516</b> .551 <b>1,700.–</b>
AN, PoE <sup>3)</sup> PoE 91. <b>516</b> .551 <b>1,650.</b> -
AN <sup>4)</sup> 230 VAC 93. <b>516</b> .551 <b>1,680.</b> -
in handata
230 VAC 52.516.551 1,6 230 VAC 71.516.551 1,6 230 VAC 81.516.551 1,6 230 VAC 83.516.551 1,6 230 VAC 85.516.551 1,6

			•
Double-sided version (incl. wall or ceiling mounting brackets)	Mounting	Item No.	€ each
Quartz clock,	wall	42. <b>516</b> .552	3,300
operating voltage 230 VAC	ceiling	42. <b>516</b> .553	3,300
DCF77 radio controlled clock,	wall	52. <b>516</b> .552	3,540
operating voltage 230 VAC 1)	ceiling	52. <b>516</b> .553	3,540
Slave clock, minute pulse 24 V,	wall	71. <b>516</b> .552	3,480
operating voltage 230 VAC	ceiling	71. <b>516</b> .553	3,480
Telegram slave clock, DCFport24,	wall	81. <b>516</b> .552	3,480
operating voltage <i>DCFport24</i> <sup>2)</sup>	ceiling	81. <b>516</b> .553	3,480
Telegram slave clock, DCFport24,		83. <b>516</b> .552	3,480
operating voltage 230 VAC		83. <b>516</b> .553	3,480
RC telegram slave clock, AirPort24,		85. <b>516</b> .552	3,700
operating voltage 230 VAC		85. <b>516</b> .553	3,700
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3</sup> ,		91. <b>516</b> .552	3,600
operating voltage 230 VAC		91. <b>516</b> .553	3,600
NTP system clock (NTP client), synchronisation by LAN 4),		93. <b>516</b> .552	3,660
operating voltage 230 VAC	ceiling	93. <b>516</b> .553	3,660

Accessories	Item No.	€ each
Mounting brackets for 1 single-sided clock, on wall, bracket length cir. 125 mm	01. <b>516</b> .502	378
Mounting brackets for 1 single-sided clock, on ceiling, bracket length cir. 130 mm	01. <b>516</b> .503	378
Metal covers for wall or ceiling mounting brackets	01. <b>515</b> .537	250

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Additional 2-digit seconds display, height 38 or 57 mm	-74	169.–
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60 529)	-95	695

All prices are subject to change without notice, packing and shipping cost (see page 185) as well as VAT for deliveries within Germany added.



Indoor digital single- and double-sided

Type series





















## DCF77 radio controlled

clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/ network is limited. Please ask for details when interested.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.



## **LED Digital Clocks** with rim-circle seconds indication ideal for broadcasting facilities and places of high publicity



Indoor digital single-sided































This 400 x 400 mm wall clock as standard shows the digital time in hours and minutes and has a circumferencial ring of red LED bar marks that show the seconds, counting up. An additional 8-character alphanumeric LED display line makes this clock a veritable "information centre". Depending on the features selected this clock is capable of providing all the information required for the assigned function - exact, professional, attractive, and outright reliable!

### **Possible indications:**

- 8-digit date display (25.09.2023)
- day of the week, spelled out (Monday)
- day of the week, abbreviated and date (Mon 25.09.)
- day of month and abbreviated month (25. Sep 23), multilingual
- additional display for seconds (48)
- stopwatch function (hh/mm/ss)
- temperature (20°C)
- city names at customer's choice with corresponding world time and timezone details (city pre-sets, see pages 128 and 129).

Whether as a single clock, as a calendar clock full of information or integrated as "master" or "slave" in a World Time Display System - this clock speaks all languages and meets all demands!



### Case

cir. 400 mm diameter metal, as standard enamelled jet black (RAL 9005). Optionally, at a surcharge, custom enamelled or with stainless steel case (1.4301 X5CrNi 18-10, German trade name V2A), in a matted finish.

Protection grade IP 40 (EN 60529).

### LED digital display(s)

4-digit hour and minute display, bartype 7-segment LED ciphers, height 57 mm, colour red. Circumferencial ring of red LED bars indicating the seconds, counting up. Automatic brightness control. Hour offset or leading zero selectable via menu. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/12 VAC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).

### Alphanumeric display (option)

16-segment alphanumeric LED bar character display, up to 8 characters, character height 30 mm, to display numeric and alphanumeric information, e. g. day of the week, month, date, and seconds. At a surcharge, end times (stopwatch mode, option) or city names (option), can be displayed. Selection via menu. Alternating display possible. Various languages.

### Front glass

Flat, shock-resistant Plexiglas®.

### World Time Display System (option)

PEWETA LED digital clocks can be integrated into a professional and intelligent World Time Display System by the PEWETA digital RS 485 data bus. Each individual LED digital clock receives the "pre-sets" pertaining to various time zones and city names. Upon selection of a time zone, local time will be displayed, regarding zone offset and local changeover dates for summer and winter time.

### Stopwatch mode (option)

These clocks can be fitted with an additional stopwatch mode (count-up/ count-down). The 8-digit alphanumeric display (option) will show hours, minutes and seconds, counting up from start or down from a pre-selected value. This mode is controlled by a wire-bound »Basic PRO« control unit (accessory). For technical data see page 133.



Indoor digital single-sided

	Operating		
Clock type	voltage	Item No.	€ each
Quartz clock	230 V AC	42. <b>525</b> .551	1,490
DCF77 radio controlled clock 1)	230 V AC	52. <b>525</b> .551	1,650
Slave clock, minute pulse 24 V		71. <b>525</b> .551	1,580
Telegram slave clock, DCFport24, 24 V <sup>2)</sup>	DCFport24	81. <b>525</b> .551	1,580
Telegram slave clock, DCFport24, 12/24 V	230 V AC	83. <b>525</b> .551	1,580
RC telegram slave clock, AirPort24	230 V AC	85. <b>525</b> .551	1,690
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>525</b> .551	1,640
NTP system clock (NTP client), synchronisation by LAN 4)	230 V AC	93. <b>525</b> .551	1,670

Accessories	Item No.	€ each
Remote control unit "Basic PRO" for stopwatch function, PEWETA digital RS485 version <sup>5)</sup>	43 <b>.548</b> .251	1,250
Remote control unit "Basic PRO" for stopwatch function, NTP/PoF version 6)	91. <b>548</b> .251	1,290.–

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case stainless steel V2A, matted finish	-20	109
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Stopwatch mode »count-up/count-down« (control unit is an accessory)	-71	169.–
City pre-sets for World Time Clock Systems	-75	139
Additional 8-character alphanumeric display	-77	325
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60 529)	-95	695

### Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.



























### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).



<sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>2)</sup> Due to power consumption the number of clocks within the system/network is limited. Please ask for details when interested.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup>NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.

<sup>5)</sup> Works with LED digital clocks including the PEWETA digital RS485 »master« option only.

<sup>&</sup>lt;sup>6)</sup>Works with NTP system clock (NTP client) clock types only..



## LED Digital Clocks with rim-circle seconds indication ideal for broadcasting facilities and places of high publicity



Indoor digital single-sided

























83.**526**.551 **-77** shown



83.**526**.551 **-77** shown



83.**526**.551 **-75 -77** shown



83.526.551 -77 -88 shown

This 400 x 400 mm wall clock as standard shows the digital time in hours and minutes and has a circumferencial ring of red LED bar marks that show the seconds, counting up. An additional 8-character alphanumeric LED display line makes this clock a veritable "information centre". Depending on the features selected this clock is capable of providing all the information required for the assigned function - exact, professional, attractive, and outright reliable!

**Possible indications:** 8-digit date display (25.09.2023)

- day of the week, spelled out (Monday)
- day of the week, abbreviated and date
- (Mon 25.09.)
- day of month and abbreviated month (25. Sep 23), multilingual
- additional display for seconds (48)
- stopwatch function (hh/mm/ss)
- temperature (20°C)
- city names at customer's choice with corresponding world time and timezone details (city pre-sets, see pages 128 and 129).

Whether as a single clock, as a calendar clock full of information or integrated as "master" or "slave" in a World Time Display System - this clock speaks all languages and meets all demands!



### Case

cir. 400 x 400 mm metal, as standard enamelled jet black (RAL 9005). Optionally, at a surcharge, custom enamelled. Protection grade IP 40 (EN 60529).

### LED digital display(s)

4-digit hour and minute display, bartype 7-segment LED ciphers, height 57 mm, colour red. Circumferencial ring of red LED bars indicating the seconds, counting up. Automatic brightness control. Hour offset or leading zero selectable via menu. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 VDC/12 VAC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).

### Alphanumeric display (option)

16-segment alphanumeric LED bar character display, up to 8 characters, character height 30 mm, to display numeric and alphanumeric information, e. q. day of the week, month, date, and seconds. At a surcharge, end times (stopwatch mode, option) or city names (option), can be displayed. Selection via menu. Alternating display possible. Various languages.

### Front glass

Flat, shock-resistant Plexiglas®.

### World Time Display System (option)

PEWETA LED digital clocks can be integrated into a professional and intelligent World Time Display System by the PEWETA digital RS 485 data bus. Each individual LED digital clock receives the "pre-sets" pertaining to various time zones and city names. Upon selection of a time zone, local time will be displayed, regarding zone offset and local changeover dates for summer and winter time.

### Stopwatch mode (option)

These clocks can be fitted with an additional stopwatch mode (count-up/ count-down). The 8-digit alphanumeric display (option) will show hours, minutes and seconds, counting up from start or down from a pre-selected value. This mode is controlled by a wire-bound »Basic PRO« control unit (accessory). For technical data see page 133.



Indoor digital single-sided

Clock type	Operating voltage	Item No.	€ each
Quartz clock	230 V AC	42. <b>526</b> .551	1,490
DCF77 radio controlled clock 1)	230 V AC	52. <b>526</b> .551	1,650
Slave clock, minute pulse 24 V	230 V AC	71. <b>526</b> .551	1,580
Telegram slave clock, DCFport24, 24 V <sup>2)</sup>	DCFport24	81. <b>526</b> .551	1,580
Telegram slave clock, DCFport24, 12/24 V	230 V AC	83. <b>526</b> .551	1,580
RC telegram slave clock, AirPort24	230 V AC	85. <b>526</b> .551	1,690
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>526</b> .551	1,640
NTP system clock (NTP client), synchronisation by LAN 4)	230 V AC	93. <b>526</b> .551	1,670

Accessories	Item No.	€ each
Remote control unit "Basic PRO" for stopwatch function, PEWETA digital RS485 version <sup>5)</sup>	43. <b>548</b> .251	1,250
Remote control unit "Basic PRO" for stopwatch function, NTP/PoE version <sup>6)</sup>	91. <b>548</b> .251	1,290

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Operating voltage 12 VDC (instead of 230 VAC)	-70	none
Stopwatch mode »count-up/count-down« (control unit is an accessory)	-71	169
City pre-sets for World Time Clock Systems	<b>-</b> 75	139
Additional 8-character alphanumeric display	-77	295
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS receiving aerial (IP 65/EN 60 529)	-95	695

### Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

1/200	STORES .
	9
1 1000	-
	1
4/	
	43. <b>548</b> .251























clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).



<sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>2)</sup> Due to power consumption the number of clocks within the system/network is limited. Please ask for details when interested.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup>NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.

<sup>5)</sup> Works with LED digital clocks including the PEWETA digital RS485 »master« option only.

<sup>&</sup>lt;sup>6)</sup>Works with NTP system clock (NTP client) clock types only..



## **LED World Time Clocks**

as stand-alone units or combined into an integrated system



**Indoor** digital single-sided

Type series 535



















These PEWETA World Time
Displays can be used as standalone units as well as combined
with further LED World Time
Displays into an integrated system. Permanent text overlays
below the time displayed indicate
the names of the cities chosen.
The software already contains the
"pre-sets" pertaining to various
time zones and city names, so
that all units can easily be set up
to always show the correct time.



LED digital clock, 4 digits, cipher height 100 mm, local time display



### Case

- cir. 520 x 250 x 43 mm
- cir. 770 x 250 x 43 mm

sturdy metal case for on-wall mounting, as standard enamelled jet black (RAL 9005). Optionally, at a surcharge, custom enamelled.

Protection grade IP 40 (EN 60529).

### **LED** digital display

- Cipher height 57 mm, 4 digits, for world time displays Cipher height 100 mm, 4 or 6 digits,
- for local time displays bar-type 7-segment LED ciphers, colour red (optionally, at a surcharge, amber, green or blue), automatic brightness control. Hour offset or leading zero may be selected via menu. Minimum 100 hours data retention in case of power loss. Operating voltage

### Front glass

Flat acrylic glass

### City "pre-set"

City "pre-sets" turn any PEWETA LED digital clock into an intelligent, professional World Time Clock. Each display unit will receive a custom "pre-set" according to the name of the city chosen by the customer. This setting includes the individual time zone and the individual dates for change-over from summer to winter time and vice versa. Manual adjustment by menu is possible.

### Alphanumeric LED digital display (option)

Alphanumeric LED digital display for city names instead of text overlays. 16-segment LED readout, max. 8 characters, character height 30 mm. The time zone desired and the name of the city are set by internal menu and may be changed at any time

### Case options

On request, we offer further case variations for our LED World Time Clocks. Everything is possible: stainless steel front panels, cases for in-wall mounting or double-sided displays! Tell us about your requirements and we will be pleased to submit our quotation.





42.535.521 -72 shown



Indoor digital single-sided

















clocks



DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort 24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

230 VAC/5060 Hz.	nal menu and may be changed at any time	e.	42. <b>535</b> .521 <b>-</b> 7	72 shown
Clock type	Cipher height	Dimensions (WHD)	Item No.	€ each
World time display with 2 world times (hou	r/minute) 57 mm	cir. 520 x 250 x 43 mm	42. <b>535</b> .521	1,450
World time display with 3 world times (hou	r/minute) 57 mm	cir. 770 x 250 x 43 mm	42. <b>535</b> .531	1,950
Local time display, 4 digits (hour/minute)	100 mm	cir. 520 x 250 x43 mm	42. <b>535</b> .911	1,250
Local time display, 6 digits (hour/minute/sed	cond) 100 mm	cir. 770 x 250 x 43 mm	42. <b>535</b> .921	1,490

Accessory	Item No.	€ each
External DCF77 receiving aerial (IP 68) for synchronisation with local time	03. <b>925</b> .151	174

Options	Suffix	Surcharge € each
Alphanumeric LED display for city names (instead of fixed overlay), 8 digits, cipher height 30 mm (surcharge per display/time zone)	-72	339
Amber LEDs (57 mm cipher height only, surcharge per display/time zone)	-78	49
Green LEDs (57 mm cipher height only, surcharge per display/time zone)	-79	89
Blue LEDs (57 mm cipher height only, surcharge per display/time zone)	-80	89
DCFport24 input for synchronisation with local time	-93	95
AirPort24 input for synchronisation with local time	-94	179
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60529)	-95	695
NTP input for system time synchronisation via LAN (optionally incl. power supply via PoE)	-98	179.–

### **Examples of World Time Clock Systems**

Compile your PEWETA World Time Clock System according to your individual ideas and requirements. Depending on the number of time zones desired, all types of PEWETA LED display units may be combined freely.

**New York** Moskow London

World Time Clock System with 5 time zones, consisting of 1 local time display (center) and 2 world time displays with 2 world times each

**New York** Moskow Vancouver London Beijing Tokyo

World Time Clock System with 7 time zones, consisting of 1 local time display (center) and 2 world time displays with 3 world times each

Vancouver New York London Frankfurt Moskow Beijing Tokyo

World Time Clock System with 7 time zones,

consisting of 1 world time display with 3 world times and 2 world time displays with 2 world times each



as modules for mounting in 19" racks (1 modular height unit)



Indoor digital 19" rack

540





















DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).



19" face plate, 1 HU, aluminium, enamelled black, acrylic front glass. WxHxD: cir. 400x44x100 mm. Protection grade IP 40 (EN 60529).

### LED digital display

Display of hours, minutes, and seconds, 6 digits, bar-type 7-segment LED ciphers, height 25 mm, colour red. Choice of one or two 6-digit displays per rack module, individually selectable as either real time clock and/or stopwatch (optional). Automatic brightness control. Hour offset or leading zero may be selected via menu. Operating voltage 12 VDC (wall-plug adapter 230 VAC/12 VDC included in delivery shipment). Under specific circumstances, the bus voltage may suffice to operate PEWETA DCFport24 version clocks2).

### Stopwatch mode (option)

These clocks can be fitted with an additional stopwatch mode (countup/count-down). The 6-digit numeric display (option) will show hours, minutes and seconds, counting up from start or down from a preselected value. This mode is controlled by a wire-bound »Basic PRO« control unit (accessory). For technical data see page 133.

Single display	Operating voltage	Item No.	€ each
Quartz clock	12 VDC	43. <b>540</b> .250	980
DCF77 radio controlled clock 1)	12 V DC	53. <b>540</b> .250	1,170
Slave clock, minute pulse 24 V	12 VDC	71. <b>540</b> .250	1,070
Telegram slave clock, DCFport24, 24 V <sup>2)</sup>	DCFport24	81. <b>540</b> .250	1,070
Telegram slave clock, DCFport24, 12/24 V	12 VDC	83. <b>540</b> .250	1,070
RC telegram slave clock, AirPort24	12 VDC	85. <b>540</b> .250	1,200
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>540</b> .250	1,190
NTP system clock (NTP client), synchronisation by LAN 4)	12 VDC	93. <b>540</b> .250	1,190

Double display	Operating voltage	Item No.	€ each
Quartz clock	12 VDC	43. <b>541</b> .250	1,450
DCF77 radio controlled clock <sup>1)</sup>	12 V DC	53. <b>541</b> .250	1,640
Slave clock, minute pulse 24 V	12 VDC	71. <b>541</b> .250	1,540
Telegram slave clock, DCFport24 <sup>2)</sup>	DCFport24	81. <b>541</b> .250	1,540
Telegram slave clock, DCFport24, 12/24 V	12 VDC	83. <b>541</b> .250	1,540
RC telegram slave clock, AirPort24	12 VDC	85. <b>541</b> .250	1,670
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>541</b> .250	1,660
NTP system clock (NTP client), synchronisation by LAN <sup>4)</sup>	12 VDC	93. <b>541</b> .250	1,660

Accessories	Item No.	€ each
Remote control unit "Basic PRO" for stopwatch function, PEWETA digital RS485 version <sup>5)</sup>	43. <b>548</b> .251	1,250
Remote control unit "Basic PRO" for stopwatch function, NTP/PoE version <sup>6)</sup>	91. <b>548</b> .251	1,290

Options	Suffix	Surcharge € each
Stopwatch mode »count-up/count-down« (control unit is an accessory)	-71	169
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60 529)	-95	695



<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/network is limited. Please ask for details when interested.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.

<sup>5)</sup> Works with LED digital clocks including the PEWETA digital RS485 »master« option only.

<sup>&</sup>lt;sup>6)</sup> Works with NTP system clock (NTP client) clock types only..



as modules for mounting in 19" racks (2 modular height units)





19" face plate, 2 HU, aluminium, enamelled black, acrylic front glass. WxHxD: cir. 400x88x40 mm. Protection grade IP 40 (EN 60529).

### **LED** digital display

Display of hours, minutes, and seconds, 6 digits, bar-type 7-segment LED ciphers, height 57 mm, colour red (optionally amber, green or blue at a surcharge). Automatic brightness control. Hour offset or leading zero may be selected via menu. Operating voltage 12 VDC (wall-plug adapter 230 VAC/12 VDC included in delivery shipment). Under specific circumstances, the bus voltage may suffice to operate PEWETA *DCFport24* version clocks <sup>2)</sup>.

### Stopwatch mode (option)

These clocks can be fitted with an additional stopwatch mode (count-up/count-down). The 6-digit numeric display (option) will show hours, minutes and seconds, counting up from start or down from a preselected value. This mode is controlled by a wire-bound »Basic PRO« control unit (accessory). For technical data see page 133.

Operating		
voltage	Item No.	€ each
12 VDC	43. <b>542</b> .550	1,100
12 V DC	53. <b>542</b> .550	1,290
12 V DC	71. <b>542</b> .550	1,190
DCFport24	81. <b>542</b> .550	1,190
12 V DC	83. <b>542</b> .550	1,190
12 V DC	85. <b>542</b> .550	1,320
PoE	91. <b>542</b> .550	1,310
12 V DC	93. <b>542</b> .550	1,310
	voltage 12 VDC 12 VDC 12 VDC 12 VDC DCFport24 12 VDC 12 VDC PoE	Operating voltage         Item No.           12 VDC         43.542.550           12 VDC         53.542.550           12 VDC         71.542.550           DCFport24         81.542.550           12 VDC         83.542.550           12 VDC         85.542.550           PoE         91.542.550           12 VDC         93.542.550

INTERSYSTEM CLOCK (INTERCLICITY), SYNCHIOMISATION OF LAIN	12 V DC	33.342.330	1,310
Accessories		Item No.	€ each
Remote control unit "Basic PRO" for stopwatch function, PEWETA digital RS485 version <sup>5)</sup>		43. <b>548</b> .251	1,250
Remote control unit "Basic PRO" for stopwatch function, NTP/PoE version 6)		91. <b>548</b> .251	1,290

		Surcharge
Options	Suffix	€ each
Stopwatch mode »count-up/count-down« (control unit is an accessory)	-71	169
Amber LEDs	-78	69
Green LEDs	-79	125
Blue LEDs	-80	125
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Alternating temperature display (external temperature sensor included)	-88	295
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60 529)	-95	695

### Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.



<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.



**Indoor** digital 19" rack

















clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

### NTP



<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/network is limited. Please ask for details when interested.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>5)</sup>Works with LED digital clocks including the *PEWETA digital RS485* »master« option only.

<sup>&</sup>lt;sup>6)</sup>Works with NTP system clock (NTP client) clock types only..



## for control panels and consoles



Indoor digital panel-mounted



















### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).



For flush panel mounting, face plate stainless steel (1.4301 X5CrNi 18/10, German trade name V2A), matted finish, acrylic front glass. WxHxD: cir. 257x64x77 mm. Protection grade IP 40 (EN 60529).

### LED digital display

Display of hours, minutes, and seconds, 6 digits, bar-type 7-segment LED ciphers, height 25 mm, colour red. Automatic brightness control. Configurable as time display or for count-up/count-down function (option). Hour offset or leading zero may be selected via menu. Minimum 100 hours data retention in case of power loss. Operating voltage 230 VAC/50...60 Hz (12 V DC/AC optional). Under specific circumstances, the bus voltage may suffice to operate PEWETA *DCFport24* version clocks2).

### Stopwatch mode (option)

These clocks can be fitted with an additional stopwatch mode (countup/count-down). The 6-digit numeric display (option) will show hours, minutes and seconds, counting up from start or down from a preselected value. This mode is controlled by a wire-bound »Basic PRO« control unit (accessory). For technical data see page 133.

Technical data		
Case	stainless steel V2A	matted finish
	dimensions (width x height x depth)	cir. 257 x 64 x 77 mm
	panel cut-out (width x height)	cir. 228 x 56 mm
Display	cipher height (hh/mm/ss)	25 mm
	readability	cir. 57 m
Power consumption		cir. 9 VA

Clock type	Operating voltage	Item No.	€ each
Quartz clock	230 V AC	42. <b>545</b> .250	950
DCF77 radio controlled clock 1)	230 V AC	52. <b>545</b> .250	1,140
Slave clock, minute pulse 24 V	230 V AC	71. <b>545</b> .250	1,040
Telegram slave clock, DCFport24, 24 V <sup>2)</sup>	DCFport24	81. <b>545</b> .250	1,040
Telegram slave clock, DCFport24, 12/24 V	230 V AC	83. <b>545</b> .250	1,040
RC telegram slave clock, AirPort24	230 V AC	85. <b>545</b> .250	1,190
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	PoE	91. <b>545</b> .250	1,160
NTP system clock (NTP client), synchronisation by LAN 4)	230 V AC	93. <b>545</b> .250	1,180

Accessories	Item No.	€ each
Remote control unit "Basic PRO" for stopwatch function, PEWETA digital RS485 version <sup>5)</sup>	43. <b>548</b> .251	1,250
Remote control unit "Basic PRO" for stopwatch function, NTP/PoE version <sup>6)</sup>	91. <b>548</b> .251	1,290

Options	Suffix	Surcharge € each
Stopwatch mode »count-up/count-down« (control unit is an accessory)	-71	169.–
PEWETA digital RS 485 master (output)	-82	100
PEWETA digital RS 485 slave (input)	-83	100
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60 529)	-95	695

### Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.



<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.



<sup>&</sup>lt;sup>2)</sup> Due to power consumption the number of clocks within the system/network is limited. Please ask for details when interested.

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.

<sup>&</sup>lt;sup>4)</sup> NTP system clocks require a LAN connection. Appropriate hardware has to be supplied by customer.

<sup>5)</sup> Works with LED digital clocks including the PEWETA digital RS485 »master« option only.

<sup>&</sup>lt;sup>6)</sup>Works with NTP system clock (NTP client) clock types only..



## **»Basic PRO« Remote Control Unit**

## for LED digital clocks equipped with stopwatch mode

This active, wire-bound "Basic PRO" remote control unit is capable of turning PEWETA LED digital clocks into stopwatches (stopwatch mode is an option), and acts as a terminal for their operation. Connection can be established either via PEWETA digital RS 485 data bus or via NTP. Both versions enable synchronous count-up/ count-down functions of all connected LED digital clocks. Since each clock within the system can be addressed individually, one remote control unit can control several stopwatches in various locations or several remote control units, e.g. at different work stations, can simultaneously trigger one LED stopwatch. By means of software, these functions can be flexibly defined and can be easily selected by the user.

Sturdy plastic tip-up case for desktop use. Dimensions (length x width) cir. 175 x 105 mm. 5" LCD touchscreen, active area cir. 108 x 65 mm, for easy operation. The status line at the top of the screen shows the current date and time as well as the status of the PEWETA digital RS 485 or NTP

### Types

### PEWETA digital RS485

connection, respectively.

Connection to an LED digital clock via PEWETA digital RS485 bus. Time and date as well as operating power are transferred to the remote control from a type PEWETA Datenbus RS485 "master" LED digital clock. Each remote control unit and LED digital clock can be addressed individually.

### NTP

This remote control unit features a network connection (RJ45). Time and date are imported via NTP. Power is supplied via PoE (Power over Ethernet). Remote control units and LED digital clocks may be individually assigned via a web browser. Operation in connection with NTP system clock (NTP client) clock types only.



Type	item No.	€ eacn
Quartz time base, PEWETA digital RS 485	43. <b>548</b> .151	1,250
NTP/PoE	91. <b>548</b> .151	1,390
		Surcharge €
Option	Suffix	each
Custom-programmed software	<b>05.548</b> .200	on request



Remote control unit for LED digital clocks

Type series	
548	





















- Count up
- Count up from "00:00:00"
- Count down

Enter a start value in hours, minutes, and seconds. Count down to "00:00:00"

layout and (special) functions as demanded

Count down to (target time) Enter a target time. The time remaining will be automatically calculated and displayed. Count down to "00:00:00".



## ideal for prestigious rooms and places of high publicity



Indoor digital single-sided



















DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from

page 172 on).

LCD digital clocks displaying hours and minutes. High definition, high contrast LCD display for outstanding readability even at extremely sharp angles.

Extra flat AluNox® metal case with anodized surface.

### LCD digital display

- cipher height 90 mm
- cipher height 140 mm
- Single line LCD display, 4 digits, extra large black 9-segment ciphers showing hours and minutes. Optionally, room temperature may be displayed alternating with time.



Technical da	ta	Cipher height 90 mm	Cipher height 140 mm
Case	material	AluNox®	AluNox®
	dimensions (WxHxD)	cir. 400 x 250 x 28 mm	cir. 540 x 334 x 30 mm
Display	cipher height hours/minutes	90 mm	140 mm
	reading distance	cir. 35 m	cir. 50 m
Weight		cir. 0.9 kg	cir. 1.2 kg

Clock type Clock type	90 mm Item No.	€ each	140 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>550</b> .791	469	51. <b>550</b> .991	599
DCF77 radio controlled clock, mains operated 230 VAC	52. <b>550</b> .791	559	52. <b>550</b> .991	689
Slave clock, minute pulse 12/24 V <sup>1)</sup>	71 <b>.550</b> .791	539	71. <b>550</b> .991	669
Telegram slave clock, DCFport24, 12/24 V <sup>2)</sup>	81. <b>550</b> .791	539	81. <b>550</b> .991	669

Accessory	Item No.	€ each
External DCF77 receiving aerial (IP 31), for radio controlled types (required only if reception quality is poor)	03. <b>925</b> .171	110

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Integrated power supply for 230 VAC mains operation instead of battery operation (on clock type 71.xxx only)	-69	98
Alternating room temperature display (internal temperature sensor)	-91	69.–
Alternating room temperature display (external temperature sensor, IP 31)	-92	99

### AluNox®

AluNox® is an anodised aluminium. While resistant to corrosion, detergents, and disinfectants, it is also abrasion-proof. The surface of AluNox® is visually very similar to stainless steel with a matted finish, yet is noticeably lighter and impervious against fingerprints. Therefore, AluNox® is excellently suited for areas where its visual resemblance of stainless steel will mainly serve decorative purposes.



<sup>1)</sup> Operation of the LCD display requires batteries (LR 6/AA type, included in delivery shipment) or an integrated power supply (optional).



 $<sup>^{2)}</sup>$ Operating voltage is supplied by the master clock via DCFport24 telegram (current draw cir. 10 mA).



## ideal for prestigious rooms and places of high publicity

LCD digital clocks displaying hours, minutes, and seconds. High definition, high contrast LCD display for outstanding readability even at extremely sharp angles.

### Case

Extra flat, sturdy plastic case enamelled metallic silver as standard.

### LCD digital display

Single line LCD display with extra large black 9-segment ciphers showing hours and minutes (cipher height 75 mm), as well as seconds (cipher height 60 mm). Optionally, room temperature may be displayed alternating with time.



		71.300.7	31 SHOWH
Technical data			
Case	colour	meta	allic silver
	dimensions (WxHxD)	cir. 422 x 225	5 x 40 mm
Display	cipher height hours/minutes		75 mm
	cipher height seconds		60 mm
	reading distance		cir. 30 m
Weight		ci	ir. 1.23 kg
Clock type		Item No.	€ each
DCF77 radio controll	ed clock, battery operated 1.5 V	51. <b>551</b> .791	479
DCF77 radio controll	ed clock, mains operated 230 VAC	52. <b>551</b> .791	569
Slave clock, minute	oulse 12/24 V <sup>1)</sup>	71. <b>551</b> .791	549
Telegram slave clock	, DCFport24, 12/24 V <sup>2)</sup>	81. <b>551</b> .791	549
Accessory		Item No.	€ each
External DCE77 race	iving aerial (IP 31), for radio controlled types	03. <b>925</b> .171	110

Options Case custom enamelled Integrated power supply for 230 VAC mains operation instead of battery operation (on clock type 71.xxx only)	Suffix -10 -69	Surcharge € each on request 98,–
Alternating room temperature display (internal temperature sensor)	-91	69,-
Alternating room temperature display (external temperature sensor, IP 31)	-92	99,-



Indoor digital single-sided

Type series
<b>551</b>





















clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

(required only if reception quality is poor)



<sup>1)</sup> Operation of the LCD display requires batteries (LR 6/AA type, included in delivery shipment) or an integrated power supply (optional).

<sup>&</sup>lt;sup>2)</sup>Operating voltage is supplied by the master clock via DCFport24 telegram (current draw cir. 10 mA).



## LCD Digital Clocks with Date Display

ideal for offices, conference rooms, and reception areas



Indoor digital single-sided



















### DCF77 radio controlled clocks

DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflinger (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. a remotable DCF77 aerial (option).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

LCD digital clocks with date display, 3 lines with the day-of-week spelled out. High definition, high contrast LCD display for outstanding readability even at extremely sharp angles.

### Case

Extra flat AluNox® metal case with anodized surface.

### LCD digital display

3-line LCD display with extra large black 9- and 42-segment ciphers respectively, top line showing hours and minutes (4 digits, cipher height 59 mm), middle line showing the day-of-week spelled out (10 digits, character height 22 mm), bottom line showing the date (6 digits, cipher height 38 mm). Optionally, room temperature may be displayed alternating with time or date.



		31.303	301 3110 1111
Technical o	lata		
Case	material		AluNox®
	dimensions (WxHxD)	cir. 318 x 2	85 x 26 mm
Display	cipher height hours/minutes		59 mm
	character height date		38 mm
	character height day-of-week		22 mm
	reading distance		cir. 10 m
Weight			cir. 0.9 kg
et 1.			
Clock type		Item No.	€ each
DCF77 radio	controlled clock, battery operated 1.5 V	51. <b>565</b> .391	579
DCF77 radio	controlled clock, mains operated 230 VAC	52. <b>565</b> .391	669
Slave clock,	minute pulse 12/24 V <sup>1)</sup>	71. <b>565</b> .391	649
Telegram sla	ave clock, DCFport24, 12/24 V <sup>2)</sup>	81. <b>565</b> .391	649
Accessory		Item No.	€ each
	F77 receiving aerial (IP 31), for radio controlled types lly if reception quality is poor)	03. <b>925</b> .171	110
			Surcharge
Options		Suffix	Surcharge € each
_	n enamelled		on request
Case Custon	ii Chamcheu	-10	on request

-69

-91

98,-

69,-

99.-

### AluNox®

AluNox® is an anodised aluminium. While resistant to corrosion, detergents, and disinfectants, it is also abrasion-proof. The surface of AluNox® is visually very similar to stainless steel with a matted finish, yet is noticeably lighter and impervious against fingerprints. Therefore, AluNox® is excellently suited for areas where its visual resemblance of stainless steel will mainly serve decorative purposes.

Integrated power supply for 230 VAC mains operation

instead of battery operation (on clock type 71.xxx only)

Alternating room temperature display (internal temperature sensor)

Alternating room temperature display (external temperature sensor, IP 31) -92



<sup>1)</sup>Operation of the LCD display requires batteries (LR 6/AA type, included in delivery shipment) or an integrated power supply (optional).

<sup>&</sup>lt;sup>2)</sup>Operating voltage is supplied by the master clock via DCFport24 telegram (current draw cir. 10 mA).



## **Analog Clocks with LCD Date Display**

ideal for offices, conference rooms, and reception areas

Classic analog clock combined with a 2-line, high definition, high contrast LCD display showing the day-of-week and the date.

### Case

Extra flat AluNox® metal case with anodized surface.

### **Analog clock**

Mechanical analog time display, face with Arabic numerals, print diameter cir. 247 mm. Exposed, black bar-type hands indicating hours and minutes, no front glass.

### LCD digital display

2-line, alphanumeric 42-segment LCD display, 12 digits, character height 26 mm, showing day-of-week spelled out and date. Various date display formats can be selected by menu. Optionally, room temperature may be displayed alternating with the date.

### Protective plexiglas cover (option)

The clocks of this type series can be supplied with an additional plexiglas cover to protect the hands. Please add this option to your initial order if required. This option cannot be retrofitted.



Technical data		
Case	material	AluNox®
	dimensions (WxHxD)	cir. 280 x 403 x 30 mm
Display	cipher height hours/minutes	cir. 245 mm
	character height day-of-week/date	cir. 26 mm
	reading distance	cir. 10 m
Weight		cir. 2 kg

According	Itom No	£ oach
relegialistate clock, per porter, 12/2 : 1	0110001101	000.
Telegram slave clock, DCFport24, 12/24 V <sup>2)</sup>	81. <b>568</b> .791	695
Slave clock, minute pulse 12/24 V <sup>1)</sup>	71. <b>568</b> .791	695
DCF77 radio controlled clock, mains operated 230 VAC	52. <b>568</b> .791	715
DCF77 radio controlled clock, battery operated 1.5 V	51. <b>568</b> .791	625
Clock type	Item No.	€ each

Accessory	Item No.	€ each
Protective plexiglas cover (cannot be added later)	01. <b>568</b> .100	149
External DCF77 receiving aerial (IP 31), for radio controlled types (required only if reception quality is poor)	03. <b>925</b> .171	110.–

Options	Suffix	Surcharge € each
Integrated power supply for 230 VAC mains operation instead of battery operation (on clock type 71.xxx only)	-69	98,-
Alternating room temperature display (internal temperature sensor)	-91	69,-
Alternating room temperature display (external temperature sensor, IP 31)	-92	99,-



Indoor analog/digital single-sided

Type series	
568	























clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M) and under conditions of free radio propagation and may be impaired in heavily rein-For this case we recommend a remotable DCF77 aerial (option).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

## AluNox®

AluNox® is an anodised aluminium. While resistant to corrosion, detergents, and disinfectants, it is also abrasion-proof. The surface of AluNox® is visually very similar to stainless steel with a matted finish, yet is noticeably lighter and impervious against fingerprints. Therefore, AluNox® is excellently suited for areas where its visual resemblance of stainless steel will mainly serve decorative purposes.



<sup>1)</sup>Operation of the LCD display requires batteries (LR 6/AA type, included in delivery shipment) or an integrated power supply (optional).

<sup>&</sup>lt;sup>2)</sup>Operating voltage is supplied by the master clock via DCFport24 telegram (current draw cir. 10 mA).



## **Analog Clocks with LCD Date Display**

ideal for offices, conference rooms, and reception areas



Indoor analog/digital single-sided

















clocks DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.) and under conditions of free radio propagation and may be impaired in heavily reinforced concrete structures. For this case we recommend a remotable DCF77 aerial (option).

### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

Classic analog clock combined with a high definition, high contrast LCD display showing the date.

### Case

Extra flat, sturdy metal case, enamelled metallic silver.

### **Analog clock**

Mechanical analog time display, face with black bar markings, print diameter cir. 380 mm. Exposed, black bar-type hands indicating hours and minutes, no front glass.

### LCD digital display

Single line alphanumeric 42-segment LCD display, 12 digits, character height 40 mm, showing the date. Various date display formats can be selected by menu. Optionally, room temperature may be displayed alternating with the date.



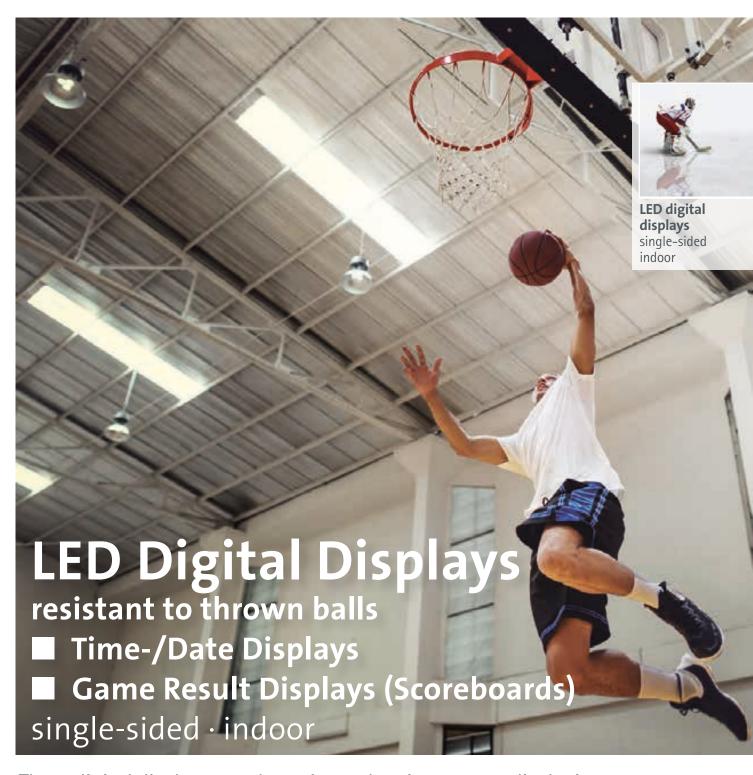
Technical da	ta		
Case	material		aluminium
	colour	m	etallic silver
	dimensions (WxHxD)	cir. 430 x 5	25 x 30 mm
Display	face diameter		380 mm
	cipher/character height date		40 mm
	reading distance		cir. 20 m
Weight			cir. 2.4 kg
Clock type		Item No.	€ each
DCF77 radio o	controlled clock, battery operated 1.5 V	51. <b>570</b> .791	879
DCF77 radio o	controlled clock, mains operated 230 VAC	52. <b>570</b> .791	969
Slave clock, m	ninute pulse 12/24 V <sup>1)</sup>	71. <b>570</b> .791	949
Telegram slav	e clock, DCFport24, 12/24 V <sup>2)</sup>	81. <b>570</b> .791	949
Accessory		Item No.	€ each
External DCF7	77 receiving aerial (IP 31), for radio controlled types r if reception quality is poor)	03. <b>925</b> .171	110.–
			Surcharge
Options		Suffix	€ each
	wer supply for 230 VAC mains operation ttery operation (on clock type 71. <b>xxx</b> only)	-69	98,-
Alternating ro	oom temperature display (internal temperature sensor)	-91	69,-
Alternating ro	oom temperature display (external temperature sensor, IP 31)	-92	99,-



<sup>1)</sup> Operation of the LCD display requires batteries (LR 6/AA type, included in delivery shipment) or an integrated power supply (optional).

 $<sup>^{2)}</sup>$ Operating voltage is supplied by the master clock via DCFport24 telegram (current draw cir. 10 mA).





These digital displays are champions when it comes to displaying information and results doubt-free and easy to comprehend.

Optimum clearness of display combined with premium quality – a professional choice in every aspect!



# **LED Digital Displays,** indoor for sports, business, and industry



**LED digital** displays single-sided indoor





















Large, very sturdy digital displays with distinct, double-row LEDs, optimum readability for all kinds of large rooms and halls, including gymnasiums.

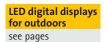
For sports applications, these LED digital displays can also be used as stopwatches. Besides basic count-up and count-down functions a complete training program with various cycles and breaks that starts automatically when triggered can be programmed using the infrared remote control, included in delivery shipment. An additional built-in buzzer resounding at the end of count-down, cycle and break can be supplied at a surcharge (option).







Examples show time, date, temperature (option), and stopwatch modes





166 and 167.



### Case

cir. 830 x 320 x 90 mm (cipher height 160 mm)

cir. 1230 x 400 x 90 mm (cipher height 250 mm) very sturdy aluminium case, enamelled black. Protection grade IP 40 (EN 60 529).

### Resistance to thrown balls

LED digital displays of this type series are resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3 and thus are suitable for gymnasiums and other indoor sporting facilities.

### Mounting

On-wall mounting.

### Front glass

Flat shock-resistant plastic glass.

### **LED digital display**

7-segment display technology, colour red, manual brightness control in 4 steps. 4-digit display with double-row LEDs showing hours and minutes, date, and temperature (option), either permanently or alternating, intervals adjustable. Operating voltage 230 VAC/50..60 Hz.

### Infrared remote control unit

All settings and the operation of the stopwatch mode are triggered by a wireless infrared remote control unit, included in delivery shipment.

### Stopwatch mode

This LED digital display can also be used as a stopwatch in count-up, count-down, and training modes. The 4-digit LED display shows minute and second readings. Operation by the wireless infrared remote control unit included.

Functions possible:

- count-up with split times
- **count-down** with indication of initial value
- training with adjustable number and duration of cycles and breaks.



**LED digital displays** single-sided indoor

Type series **610** 





















DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

clocks

PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

### Further models

of this type series with different cipher heights and/or with a 6-digit display (hh:mm:ss) are available on request.

Technical data		Cipher height 160 mm	Cipher height 250 mm
Case	colour	black (RAL 9005)	black (RAL 9005)
	dimensions (WxHxD)	cir. 830 x 320 x 90 mm	cir. 1230 x 400 x 90 mm
	weight	cir. 10 kg	cir. 15 kg
LED display	cipher height hours/minutes	cir. 160 mm	cir. 250 mm
	cipher colour	red	red
	reading distance	cir. 70 m	cir. 110 m

Туре	Cipher height ▶ Operating voltage ▼		€ each	250 mm Item No.	€ each
Quartz clock	230 VAC	42. <b>610</b> .161	1,950	42. <b>610</b> .251	2,690
DCF77 radio controlled clock <sup>1)</sup>	230 VAC	52. <b>610</b> .161	2,250	52. <b>610</b> .251	2,990
Telegram slave clock, DCFport24, 12/24 V	230 VAC	83. <b>610</b> .161	2,050	83. <b>610</b> .251	2,790

Options	Suffix	Surcharge € each
Alternating temperature display, external temperature sensor (IP 54) included	-66	249
Built-in buzzer, automatically resounding at the end of count-down, cycle, and break respectively in stopwatch mode (duration adjustable from 0 to 4 seconds)	-67	295

### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

LED digital displays for outdoors see pages 166 and 167.

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial is included in delivery shipment.



# **LED Game Result Displays/Scoreboards,** indoor **"Multisport"**, for most kinds of indoor sports



**LED** game result displays single-sided indoor























Game result displays/scoreboards, in 7-Segment LED display technology, cipher heights 250 mm and 200 mm respectively, reading distance up to cir. 110 m. Outstandingly suited for most kinds of indoor sports, such as indoor soccer, handball, basketball, volleyball, hockey, badminton, and table tennis.

Sturdy metal case, enamelled black, for on-wall mounting, polycarbonate front glass treated for low reflectivity, resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3.



Game result display board with LED text display for team names

Soccer scoreboards for outdoors

see pages 168 and 169.





### Scoreboard 24.676.321:

- Time display (250 mm), 4-digit, white, showing minutes and seconds of game time, time elapsed or timeto-ao
- Real time clock (250 mm), showing current time in hours and minutes when no game is going on (instead of game time), quartz-based, optionally DCF77 radio controlled (including receiving aerial) or connected to a PEWETA Master Clock by means of a DCFport24 interface (accessories)
- Score (250 mm), 3 digits (0..199) per team, red, showing score/final result
- Period (200 mm), 1 digit, green, showing current period of game
- Penalty time (200 mm), 3 digits per team, amber, showing penalty time remaining
- Team fouls (200 mm), 1 digit per team, amber, showing total fouls per team during basketball games (instead of penalty time)
- Red square marker, 1 per team, can be set to indicate the 5th foul of a team during basketball games
- Time-out, 3 symbols per team (green dots), showing time-out periods taken
- Service, 1 symbol per team (red arrow), showing service or ball possession
- Acoustic signal (horn), built-in, indicates time-out, end of period or game over, may be triggered either automatically or manually (116 dB at 1 m)
- Permanent HOME/GUEST marking by self-adhesive film, available in various languages.

### Scope of delivery

- 1 control panel, multi-lingual, data transfer by radio, frequency 868..869 MHz (standard), or wirebased (set of wires is an accessory), with LCD display and keyboard. 13 kinds of sports stored. Additional, freely programmable mode or training mode
- 1 wall plug adapter for charging the rechargeable batteries of the control
- 1 hand-held control unit to send start, stop, and time-out commands and to trigger the horn, incl. 2 m wire for hook-up with the control panel (if required)
- 1 transport case (cir. 355x255x86 mm) to safely store control panel, control unit, and plug adapter.

### Scoreboard 24.676.322:

exactly as Scoreboard 24.676.321, however, additionally with

■ LED text display (120 mm), amber, alphanumeric, to indicate the teams' names (instead of "HOME", "GUEST"). up to 9 characters per team, or to display information/advertisements with up to 20 characters in moving-script-method (up to 1,000 characters programmable). PC keyboard with connection wire to the control panel is included.

### **Further models**

of this type series with 150 mm LED cipher height for small (single field) sports halls are available on request.

Technical data	
Data transmission	wireless 868869 MHz (standard) or, additionally, wire-based (set of wires is an accessory)
Case dimensions (WHD)	cir. 1900 x 1150 x 90 mm
Front cover	polycarbonate treated for low reflectivity
Character heights	250 mm and 200 mm, respectively
Reading distance	cir. 110 m, view angle cir. 160°
Weight	cir. 35 kg
Operating voltage	mains 220230 V AC/5060 Hz

Туре	Item No.	€ each
Scoreboard with HOME/GUEST marking by self-adhesive film	24. <b>676</b> .321	5,090
Scoreboard with LED text display	24. <b>676</b> .322	6,590
Accessories	Item No.	€ each
DCF77 receiving aerial (IP65) for precise local time and fully automatic change-over of summer/winter time	03. <b>925</b> .185	295
Time display interface to import the <i>DCFport24</i> pulse telegram from a PEWETA type series 921 master clock	04. <b>676</b> .000	95
Set of wires for wire-based or wireless data transfer from control panel to scoreboard, 10 m of wire, plug, and socket included	04. <b>676</b> .001	160
Additional plug and socket A3 to control the panel from a further	04. <b>676</b> .101	125

### Control panel and software

Modes for 13 different kinds of sports plus an additional, freely programmable mode and a training mode (cycles and breaks adjustable) are stored in the control panel. Various parameters, like the duration of a game, extra time, time out, etc., can be adjusted as required, e.g. for youth teams. Up to 10 individual configurations with individual names such as "handball juniors" can be saved. Software updates can be loaded by flash drive using the built-in USB interface, e.g. in case of rule changes.



**LED** game result displays single-sided indoor

Type series

























Soccer scoreboards for outdoors

see pages 168 and 169.



## LED Game Result Displays/Scoreboards, indoor with penalty time display for handball and hockey



**LED** game result displays single-sided indoor

676

















Game result displays/scoreboards, in 7-Segment LED display technology, composed of a main scoreboard and a 3-line penalty time display. As a stand-aloneunit, the main scoreboard is suited for most kinds of indoor sports. For handball and hockey, the augmenting penalty time display can show up to 3 penalty times per team, along with a 2-digit player number.

Sturdy metal case, enamelled black, for on-wall mounting, polycarbonate front glass treated for low reflectivity, resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3.



Game result display board with LED text display for team names

Soccer scoreboards for outdoors

see pages 168 and 169.





#### Scoreboard 24.676.541:

- Time display (250 mm), 4-digit, white, showing minutes and seconds of game time, time elapsed or timeto-ao
- Real time clock (250 mm), showing current time in hours and minutes when no game is going on (instead of game time), quartz-based, optionally DCF77 radio controlled (including receiving aerial) or connected to a PEWETA Master Clock by means of a DCFport24 interface (accessories)
- Score (250 mm), 3 digits (0..199) per team, red, showing score/final result
- Period (200 mm), 1 digit, green, showing current period of game
- Team fouls (200 mm), 1 digit per team, amber, showing total fouls per team during basketball games (instead of penalty time)
- Red square marker, 1 per team, can be set to indicate the 5th foul of a team during basketball games
- Time-out, 3 symbols per team (green dots), showing time-out periods taken
- Service, 1 symbol per team (red arrow), showing service or ball possession
- Penalty time (160 mm), 3 lines with 3 penalty times per team, each composed of 2-digit player number (white) and 3-digit penalty time (red), showing penalty time counting down
- Acoustic signal (horn), built-in, indicates time-out, end of period or game over, may be triggered either automatically or manually (116 dB at 1 m)
- Permanent HOME/GUEST marking by self-adhesive film, available in various languages.

#### Scope of delivery

- 1 control panel, multi-lingual, data transfer by radio, frequency 868..869 MHz (standard), or wirebased (set of wires is an accessory), with LCD display and keyboard. 13 kinds of sports stored. Additional freely programmable mode or trainina mode
- 1 wall plug adapter for charging the rechargeable batteries of the control panel
- 1 hand-held control unit to send start, stop, and time-out commands and to trigger the horn, incl. 2 m wire for hook-up with the control panel (if required)
- 1 transport case (cir. 355x255x86 mm) to safely store control panel, control unit, and plug adapter.

#### Scoreboard 24.676.542:

exactly as Scoreboard 24.676.541, however, additionally with

■ LED text display (120 mm), amber, alphanumeric, to indicate the teams' names (instead of "HOME", "GUEST"), up to 9 characters per team, or to display information/advertisements with up to 20 characters in moving-script-method (up to 1,000 characters programmable). PC keyboard with connection wire to the control panel is included.

#### Further models

with 2-line penalty time display, either below or lateral to the main scoreboard, are available on request.

Technical data	
Data transmission	wireless 868869 MHz (standard) or, additionally, wire-based (set of wires is an accessory)
Case dimensions (WHD)	cir. 1900 x2000 x 90 mm
Front cover	polycarbonate treated for low reflectivity
Character heights	250 mm, 200 mm, and 160 mm, respectively
Reading distance	cir. 110 m, view angle cir. 160°
Weight	cir. 50 kg
Operating voltage	mains 220230 V AC/5060 Hz

Туре	Item No.	€ each
Scoreboard with HOME/GUEST marking by self-adhesive film	24. <b>676</b> .541	8,090
Scoreboard with LED text display	24. <b>676</b> .542	9,590
Accessories	Item No.	€ each
DCF77 receiving aerial (IP65) for precise local time and fully automatic change-over of summer/winter time	03. <b>925</b> .185	295.–
Time display interface to import the <i>DCFport24</i> pulse telegram from a PEWETA type series 921 master clock	04. <b>676</b> .000	95
Set of wires for wire-based or wireless data transfer from control panel to scoreboard, 10 m of wire, plug, and socket included	04. <b>676</b> .001	160
Additional plug and socket A3 to control the panel from a further location (for wireless operation using set of wires 04.676.001)	04. <b>676</b> .101	125

#### Control panel and software

Modes for 13 different kinds of sports plus an additional, freely programmable mode and a training mode (cycles and breaks adjustable) are stored in the control panel. Various parameters, like the duration of a game, extra time, time out, etc., can be adjusted as required, e.g. for youth teams. Up to 10 individual configurations with individual names such as "handball juniors" can be saved. Software updates can be loaded by flash drive using the built-in USB interface, e.g. in case of rule changes.



**LED** game result displays single-sided indoor

Type series

























Soccer scoreboards for outdoors



# **LED Game Result Displays/Scoreboards,** indoor with foul displays for **basketball**



LED game result displays single-sided indoor

Type series 676



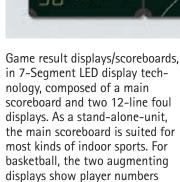












Sturdy metal case, enamelled black, for on-wall mounting, polycarbonate front glass treated for low reflectivity, resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3.

and the number of their personal

fouls.



Game result display board with LED text display for team names



Combined game result display board with penalty time displays for handball or hockey and foul displays for basketball. Item Numbers and prices



Soccer scoreboards for outdoors



#### Scoreboard 24.676.551:

- Time display (250 mm), 4-digit, white, showing minutes and seconds of game time, time elapsed or timeto-ao.
- Real time clock (250 mm), showing current time in hours and minutes when no game is going on (instead of game time), quartz-based, optionally DCF77 radio controlled (including receiving aerial) or connected to a PEWETA Master Clock by means of a DCFport24 interface (accessories)
- Score (250 mm), 3 digits (0..199) per team, red, showing score/final result
- Period (200 mm), 1 digit, green, showing current period of game
- Penalty time (200 mm), 3 digits per team, amber, showing penalty time counting down
- Team fouls (200 mm), 1 digit per team, amber, showing total fouls per team during basketball games (instead of penalty time)
- Red square marker, 1 per team, can be set to indicate the 5th foul of a team during basketball games
- Time-out, 3 symbols per team (green dots), showing time-out periods taken
- Service, 1 symbol per team (red arrow), showing service or ball possession
- Personal fouls (90 mm), 12 lines per team, each line showing a 2-digit player number (white) as well as 4 amber dots (number of fouls) and 1 red dot (5th foul)
- Acoustic signal (horn), built-in, indicates time-out, end of period or game over, may be triggered either automatically or manually (116 dB at 1 m)
- Permanent HOME/GUEST marking by self-adhesive film, available in various languages.
- Advertising panel, cir. 1900x850x90 mm, for application of sponsors' or advertisers' logos.

#### Scope of delivery

Technical data Data transmission

Front cover

Weight

Case dimensions (WHD)

Character heights

Reading distance

- 2 control panels, multi-lingual, data transfer by radio, frequency 868..869 MHz (standard), or wire-based (set of wires is an accessory), with LCD display and keyboard. 13 kinds of sports stored. Additional freely programmable mode or training mode
- 1 wall plug adapter for charging the rechargeable batteries of the control panel
- 1 hand-held control unit to send start, stop, and time-out commands and to trigger the horn, incl. 2 m wire for hook-up with the control panel (if required)
- **2** transport cases (cir. 355 x 255 x 86 mm) to safely store control panels, control unit, and plug adapter.

#### Scoreboard 24.676.552:

exactly as Scoreboard 24.676.551, however, additionally with

■ LED text display (120 mm), amber, alphanumeric, to indicate the teams' names (instead of "HOME", "GUEST"), up to 9 characters per team, or to display information/advertisements with up to 20 characters in moving-script-method (up to 1,000 characters programmable). PC keyboard with connection wire to the control panel is included.

#### Further models

or, additionally, wire-based (set of wires is an accessory)

wireless 868..869 MHz (standard)

cir. 110 m, view angle cir. 160°

polycarbonate treated for low reflectivity

250 mm, 200 mm, and 90 mm, respectively

cir. 3200 x2000 x 90 mm

cir. 120 kg

location (for wireless operation using set of wires 04.676.001)

with an additional penalty time display below the main scoreboard and/or with different cipher heights are available on request.

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**LED** game result displays single-sided indoor

Type series
676













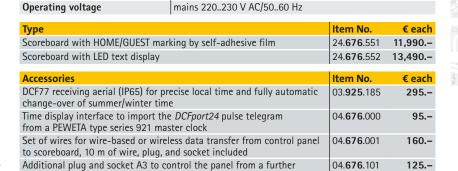












#### Control panel and software

Modes for 13 different kinds of sports plus an additional, freely programmable mode and a training mode (cycles and breaks adjustable) are stored in the control panel. Various parameters, like the duration of a game, extra time, time out, etc., can be adjusted as required, e.g. for youth teams. Up to 10 individual configurations with individual names such as "handball juniors" can be saved. Software updates can be loaded by flash drive using the built-in USB interface, e.g. in case of rule changes.

> Soccer scoreboards for outdoors



# **LED 14-/24-Second Display Boards,** indoor for **basketball**, with or without time display



**LED** game result displays single-sided indoor

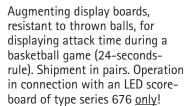
Type series **676** 











Sturdy black plastic case for onwall mounting or for mounting on substructure supplied by client. Polycarbonate front glass treated for low reflectivity, resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3.

#### **Type 24.676.613:**

- Attack time (230 mm), 2-digit, red, showing the duration of current attack (adjustable to 14 or 24 seconds), counting down. Tenths of seconds shown during final 5 seconds
- State of game, 1 illuminated red dot, showing time-out
- Acoustic signal (horn), built-in, automatically resounds after end of attack time (116 dB at 1 m).

#### Type 24.676.622:

- Time display (160 mm), 4-digit, amber, showing game time elapsed (taken over from main scoreboard)
- Attack time (250 mm), 2-digit, red, showing the duration of current attack (adjustable to 14 or 24 seconds), counting down. Tenths of seconds shown during final 5 seconds
- State of game, 1 illuminated red dot, showing time-out
- Acoustic signal (horn), built-in, automatically resounds after end of attack time (116 dB at 1 m).

#### Scope of delivery

- 2 displays acc. to description
- 1 hand-held control unit to be connected to the control unit of the main scoreboard, including 2 m of wire. Separate keys to adjust to 14 or 24 seconds (new FIBA rule of October 2014)
- 1 transport case (cir. 265×225×50 mm) to safely store control unit and wire.



Technical data	
Data transmission	via main display panel
Front cover	polycarbonate treated for low reflectivity
Reading distance	cir. 80 m
Weight per unit	cir. 2,5 kg (24.676. <b>613</b> ), cir. 6 kg (24.676. <b>622</b> )
Operating voltage	mains 220230 V AC/5060 Hz

		Dimensions		
Туре	Cipher heights	WHD per display	Item No.	€ each
1 line, without (game) time display	230 mm	500 x 300 x 65 mm	24. <b>676</b> .613	1,995
2 lines, with (game) time display	160/250 mm	870×570×90 mm	24. <b>676</b> .622	4,995

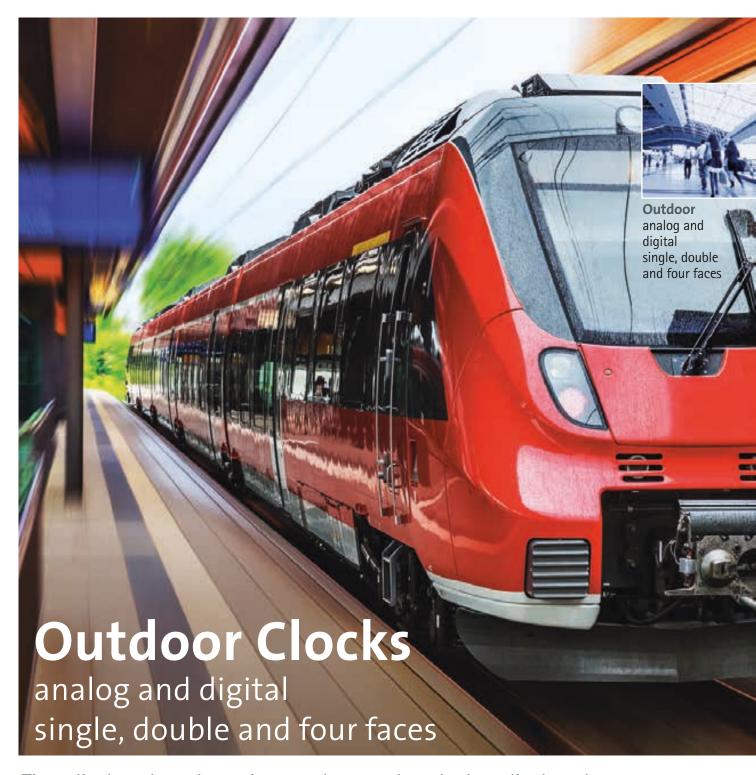
#### Further models

of these 14-/24-second display boards for stand-alone operation (without connection to a main LED scoreboard of type series 676) available on request.









Time displayed outdoors, in a modern analog clock or displayed digitally alternating with date and temperature, ideally combined with your company's logo, has always been and still is a public service information in high demand. Take advantage of this demand by using PEWETA outdoor clocks and display systems! Water protected and resistant against weather and other environmental influences.



## **Outdoor Clocks**

single face, round, not backlighted



Outdoor analog single face























Extraordinarily sturdy high quality industrial grade outdoor clocks. Solid workmanship, not backlighted, weather protected case (IP 54/EN 60 529).

Also available "resistant to thrown balls" according to DIN 18032, part 3.



71.**730**.421 shown

"Also available "**resistant** to thrown balls"

**Indoor clocks** resistant to thrown balls see pages 64 ... 67.



- cir. 446 mm diameter
- cir. 546 mm diameter
- cir. 646 mm diameter

very sturdy metal case, enamelled metallic dark gun metal (DB 703) or, as an option, enamelled in metallic silver grey (RAL 9006) or custom enamelled, as listed below. Extraordinarily solid construction, absolutely corrosion resistant and weatherproof.

Protection grade IP 54 (EN 60 529).

#### Mounting

Wall mounting.

#### Resistance to thrown balls acc. to DIN 18032, part 3 (option)

Clocks of this type series are also available resistant to thrown balls and thus suitable for school yards and sporting facilities. Very sturdy case with three-point mounting as a safeguard, proof against wrenching of the hook. Front glass is a 2-layer laminated safety glass, 6 mm thick. The clocks are certified and labelled "resistant to thrown balls according to DIN 18032, part 3".

#### Front glass

Flat shock-resistant Plexiglas® XT (PMMA) as standard.

#### Face

High distinction white metal, choice of large black Arabic numerals or large black DIN bar markings. Very distinctive and easy doubt-free reading even over longer distances. Visible face diameter 420 mm, 520 mm resp. 620 mm. Faces printed according to DIN 41 091.

#### Hands

Pointed black DIN bar-type hands (DIN 41092) for hour and minute.

Red second hand on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.



Outdoor analog single face

730

Arabic numerals  ▼ Clock type	Face diameter >	420 mm Item No.	€ each	520 mm Item No.	€ each	620 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 2x	: 1.5 V 1) 2)	51. <b>730</b> .411	940	51. <b>730</b> .511	1,079.–	51. <b>730</b> .611	1,290
DCF77 radio controlled clock, mains operated 230	VAC <sup>2)</sup>	52. <b>730</b> .411	980	52. <b>730</b> .511	1,119	52. <b>730</b> .611	1,330
Slave clock, minute pulse 1260 V		71. <b>730</b> .411	609	71. <b>730</b> .511	749	71. <b>730</b> .611	899
Slave clock, minute/second pulse 12/24 V		72. <b>730</b> .411	834	72. <b>730</b> .511	974	72. <b>730</b> .611	1,124
Slave clock, min. pulse 12/24 V, synch. second har	nd 230 VAC/50 Hz	74. <b>730</b> .411	1,019	74. <b>730</b> .511	1,159	74. <b>730</b> .611	1,309
Telegram slave clock, DCFport24, 24 V		81. <b>730</b> .411	699	81. <b>730</b> .511	839	81. <b>730</b> .611	989
RC telegram slave clock, AirPort24, battery op. 1.5	5 V <sup>1)</sup>	84. <b>730</b> .411	824	84. <b>730</b> .511	964	84. <b>730</b> .611	1,114
RC telegram slave clock, <i>AirPort24</i> , mains operate with outage reserve	d 230 VAC,	85. <b>730</b> .411	864	85. <b>730</b> .511	1,004.–	85. <b>730</b> .611	1,154.–
NTP system clock (NTP client), synchronisation by	LAN, PoE <sup>3)</sup>	91. <b>730</b> .411	929	91. <b>730</b> .511	1,069	91. <b>730</b> .611	1,219

DIN bar markings Face diameter ► ▼ Clock type	420 mm Item No.	€ each	520 mm Item No.	€ each	620 mm Item No.	€ each
DCF77 radio controlled clock, battery operated 2 x 1.5 V <sup>1) 2)</sup>	51. <b>730</b> .421		51. <b>730</b> .521		51. <b>730</b> .621	1,290
DCF77 radio controlled clock, mains operated 230 VAC <sup>2)</sup>	52. <b>730</b> .421	980	52. <b>730</b> .521	1,119	52. <b>730</b> .621	1,330
Slave clock, minute pulse 1260 V	71. <b>730</b> .421	609	71. <b>730</b> .521	749	71. <b>730</b> .621	899
Slave clock, minute/second pulse 12/24 V	72. <b>730</b> .421	834	72. <b>730</b> .521	974	72. <b>730</b> .621	1,124
Slave clock, min. pulse 12/24 V, synch. second hand 230 VAC/50 Hz	74. <b>730</b> .421	1,019	74. <b>730</b> .521	1,159	74. <b>730</b> .621	1,309
Telegram slave clock, DCFport24, 24 V	81. <b>730</b> .421	699	81. <b>730</b> .521	839	81. <b>730</b> .621	989
RC telegram slave clock, AirPort24, battery op. 2 x 1.5 V <sup>1)</sup>	84. <b>730</b> .421	824	84. <b>730</b> .521	964	84. <b>730</b> .621	1,114
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>730</b> .421	864	85. <b>730</b> .521	1,004	85. <b>730</b> .621	1,154
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>730</b> .421	929	91. <b>730</b> .521	1,069	91. <b>730</b> .621	1,219

Options	420 mm Suffix	Surcharge € each		Surcharge € each		Surcharge € each
Case enamelled in metallic silver grey RAL 9006	-05	none	-05	none	-05	none
Case custom enamelled	-10	on request	-10	on request	-10	on request
Resistance to thrown halls acc to DIN 18032, part 3	-59	179 -	-59	179 -	-59	179 –

Case colour	Suffix
metallic silver grey RAL 9006	-05
custom enamelled	-10

Quartz

















#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

**Indoor clocks** resistant to thrown balls

see pages 64 ... 67.



<sup>&</sup>lt;sup>1)</sup> Alkaline batteries are included in delivery shipment (medium lifespan: cir. 4 years).

<sup>&</sup>lt;sup>2)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



## **Outdoor Clocks**

double face, round, not backlighted



Outdoor analog double face





















Extraordinarily sturdy high quality industrial grade outdoor clocks. Solid workmanship, not backlighted, weather protected case (IP 54/EN 60 529).





**Options** 

Case custom enamelled

- cir. 446 mm diameter
- cir. 546 mm diameter
- cir. 646 mm diameter

very sturdy metal case, enamelled metallic dark gun metal (DB 703) or, as an option, enamelled in metallic silver grey (RAL 9006) or custom enamelled, as listed below. Extraordinarily solid construction, absolutely corrosion resistant and weatherproof.

Protection grade IP 54 (EN 60529).

#### Mounting

Choice of double bracket wall or ceiling mounting, standard bracket length cir. 210 mm.

#### Front glasses

Flat shock-resistant Plexiglas® XT (PMMA).

High distinction white metal, choice of large black Arabic numerals or large black DIN bar markings. Very distinctive and easy doubt-free reading even over longer distances. Visible face diameter 420 mm, 520 mm resp. 620 mm. Faces printed according to DIN 41 049.

#### Hands

Pointed black DIN bar-type hands (DIN 41092) for hour and minute.

Double face clocks

wired and pre-assembled.

Red second hands on minute/second pulse clocks (72.xxx) and on clocks with synchronous second hands (74.xxx) only.

Double face clocks come completely

Just mount them and plug in - that's it!



Outdoor analog double face

Type series
732

Arabic numerals ▼ Clock type	Face diameter ► Mounting ▼		€ each	520 mm Item No.	€ each	620 mm Item No.	€ each
DCF77 radio controlled clock, mains operated 230		52. <b>732</b> .412		52. <b>732</b> .512	•	52. <b>732</b> .612	2,179
	ceiling	52. <b>732</b> .413	1,784.–	52. <b>732</b> .513	1,955.–	52. <b>732</b> .613	2,179
Slave clock, minute pulse 1260 V		71. <b>732</b> .412		71. <b>732</b> .512	•	71. <b>732</b> .612	1,785
	ceiling	71. <b>732</b> .413	1,395.–	71. <b>732</b> .513	1,565	71. <b>732</b> .613	1,785
Slave clock, minute/second pulse 12/24 V	wall	72. <b>732</b> .412	1,845	72. <b>732</b> .512	2,015	72. <b>732</b> .612	2,235
	ceiling	72. <b>732</b> .413	1,845	72. <b>732</b> .513	2,015	72. <b>732</b> .613	2,235
Slave clock, minute pulse 12/24 V,	wall	74. <b>732</b> .412	2,215	74. <b>732</b> .512	2,385	74. <b>732</b> .612	2,605
synchronous second hand 230 VAC/50 Hz	ceiling	74. <b>732</b> .413	2,215	74. <b>732</b> .513	2,385	74. <b>732</b> .613	2,605
Telegram slave clock, DCFport24, 24 V	wall	81. <b>732</b> .412	1,509	81. <b>732</b> .512	1,679	81. <b>732</b> .612	1,900
	ceiling	81. <b>732</b> .413	1,509	81. <b>732</b> .513	1,679	81. <b>732</b> .613	1,900
RC telegram slave clock, AirPort24,	wall	85. <b>732</b> .412	1,699	85. <b>732</b> .512	1,869	85. <b>732</b> .612	2,090
mains operated 230 VAC, with outage reserve	ceiling	85. <b>732</b> .413	1,699	85. <b>732</b> .513	1,869	85. <b>732</b> .613	2,090
NTP system clock (NTP client),	wall	91. <b>732</b> .412	1,739	91. <b>732</b> .512	1,909	91. <b>732</b> .612	2,130
synchronisation by LAN, PoE <sup>2)</sup>	ceiling	91. <b>732</b> .413	1,739	91. <b>732</b> .513	1,909	91. <b>732</b> .613	2,130

DIN bar markings ▼ Clock type	Face diameter ► Mounting ▼		€ each	520 mm Item No.	€ each	620 mm Item No.	€ each
DCF77 radio controlled clock, mains operated 23	0 VAC <sup>1)</sup> wall	52. <b>732</b> .422 52. <b>732</b> .423	1,784.–	52. <b>732</b> .522 52. <b>732</b> .523	1,955.–	52. <b>732</b> .622 52. <b>732</b> .623	2,179 2,179
Slave clock, minute pulse 1260 V	wall	71. <b>732</b> .422 71. <b>732</b> .423	1,395	71. <b>732</b> .522 71. <b>732</b> .523	1,565	71. <b>732</b> .622 71. <b>732</b> .623	1,785 1,785
Slave clock, minute/second pulse 12/24 V	wall	72. <b>732</b> .422 72. <b>732</b> .423	1,845	72. <b>732</b> .522 72. <b>732</b> .523	2,015	72. <b>732</b> .622 72. <b>732</b> .623	2,235 2,235
Slave clock, minute pulse 12/24 V, synchronous second hand 230 V AC/50 Hz	wall	74. <b>732</b> .422 74. <b>732</b> .423	2,215	74. <b>732</b> .522 74. <b>732</b> .523	2,385	74. <b>732</b> .622 74. <b>732</b> .623	2,605 2,605
Telegram slave clock, <i>DCFport24</i> , 24 V	wall	81. <b>732</b> .422 81. <b>732</b> .423	1,509	81. <b>732</b> .522 81. <b>732</b> .523	1,679	81. <b>732</b> .622 81. <b>732</b> .623	1,900 1,900
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	wall	85. <b>732</b> .422 85. <b>732</b> .423	1,699	85. <b>732</b> .522 85. <b>732</b> .523	1,869	85. <b>732</b> .622 85. <b>732</b> .623	2,090 2,090
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>2)</sup>	wall	91. <b>732</b> .422 91. <b>732</b> .423	1,739	91. <b>732</b> .522 91. <b>732</b> .523	1,909	91. <b>732</b> .622 91. <b>732</b> .623	2,130 2,130
, , , , , , , , , , , , , ,		420 mm	Curchargo		Curchargo		Curchargo

Suffix

-05

-10

Suffix

€ each

none -05

on request -10

Case colour	Suffix
metallic silver grey RAL 9006	-05
custom enamelled	-10

**Suffix** 

€ each

none -05

on request -10

	7	3	32	
5	23	οV		



















#### clocks DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus,

optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from

#### PEWETA AirPort24

page 172 on).

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

€ each

on request

none

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Case enamelled in metallic silver grey RAL 9006

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Outdoor Clocks** (also suitable for large halls) single face, round, **backlighted by LED**



**Outdoor** analog single face

Type series 750





















Extraordinarily sturdy high quality industrial grade outdoor clocks, also suitable for indoors. Solid workmanship, backlighted by LED, weather protected case (IP 54/EN 60 529).



Clocks of this type series with Arabic numerals bear the Item Number suffix **-48**.



cir. 670 mm diameter cir. 902 mm diameter weatherproof aluminium case. Outside 2-layer tempered enamel. light grey (RAL 7035). Optionally custom enamelled, at a surcharge. Extraordinarily solid construction, incl. light fitting. Absolutely corrosion resistant and weatherproof.

#### Mounting

On-wall mounting as standard. At a surcharge, a wall or ceiling mounting bracket or a pole adapter are available as options.

Protection grade IP 54 (EN 60529).

#### Front glass

Shock-resistant, highly transparent 4 mm Plexiglas® XT. For locations prone to impact or public areas, unbreakable Makrolon® (polycarbonate) front glass is available as an option.

#### Face (backlighted)

Acrylic plastic, white, translucent, 5 mm thick, large black DIN bar markings (or black Arabic numerals as an option). Very distinctive and easy doubt-free reading even over longer distances. Face printed according to DIN 41049.

#### Illumination

Backlighting by durable, maintenance-free light-emitting diodes (LEDs), operating voltage 230 VAC/50...60 Hz. As an option, a light-sensitive switch can be included.

Pointed black DIN bar-type hands (DIN 41092) for hour and minute. Distinctive red "Railway Station clock" type second hand with "eye" on slave clock with synchronous second hand (74.xxx)

No second hand on other clock types.



Outdoor analog single face

Type series	
<b>750</b>	

























#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Face diameter ►	600 mm		800 mm	
Clock type	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	52. <b>750</b> .621	2,110	52. <b>750</b> .821	2,750
Slave clock, minute pulse 1260 V	71. <b>750</b> .621	1,620	71. <b>750</b> .821	2,260
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 Hz	74. <b>750</b> .621	2,250	74. <b>750</b> .821	2,890
Telegram slave clock, DCFport24, 24 V <sup>2</sup>	81. <b>750</b> .621	1,980	81. <b>750</b> .821 <sup>2)</sup>	2,620
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve	85. <b>750</b> .621	2,210	85. <b>750</b> .821	2,850
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>750</b> .621	2,390	91. <b>750</b> .821	3,030

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case with lugs for suspension by ropes or chains (indoor mounting only)	-30	on request
Wall or ceiling mounting bracket for single face outdoor clocks, standard length 240 mm	-34	290
Pole adapter for lateral mounting by means of stainless steel tightening straps (not included)	-35	415
Pole adapter for central mounting (mounting bracket, length cir. 300 mm)	-36	on request
Light-sensitive switch for internal illumination	-44	250
Custom logo on clock face	-47	on request
Face with Arabic numerals instead of DIN bar markings	-48	on request
Unbreakable Makrolon® front glass instead of Plexiglas® (for 670 mm diameter clocks only)	-55	295

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>2)</sup> DCFport24 pulse telegram slave clocks with 800 mm face diameter require a 230 VAC power supply.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Outdoor Clocks** (also suitable for large halls) double face, round, **backlighted by LED**



Outdoor analog double face

Type series 752























Extraordinarily sturdy high quality industrial grade outdoor clocks, also suitable for indoors. Solid workmanship, backlighted by LED, weather protected case (IP 54/EN 60 529).



Clocks of this type series with Arabic numerals bear the Item Number suffix **-48**.



cir. 670 mm diameter cir. 902 mm diameter weatherproof aluminium case. Outside 2-layer tempered enamel. light grey (RAL 7035). Optionally custom enamelled, at a surcharge. Extraordinarily solid construction, incl. light fitting. Absolutely corrosion resistant and weatherproof. Protection grade IP 54 (EN 60529).

#### Mounting

Choice of wall or ceiling mounting, standard length cir. 240 mm. Optionally, at a surcharge, a ceiling suspension in extended length, cir. 480 mm, or a pole adapter are available.

#### Front glasses

Shock-resistant, highly transparent 4 mm Plexiglas® XT. For locations prone to impact or public areas, unbreakable Makrolon® (polycarbonate) front glasses are available as an option.

#### Faces (backlighted)

Acrylic plastic, white, translucent, 5 mm thick, large black DIN bar markings (or black Arabic numerals as an option). Very distinctive and easy doubt-free reading even over longer distances. Faces printed according to DIN 41 049.

#### Illumination

Backlighting by durable, maintenance-free light-emitting diodes (LEDs), operating voltage 230 VAC/50...60 Hz. As an option, a light-sensitive switch can be included.

ceiling 91.**752**.623

Pointed black DIN bar-type hands (DIN 41092) for hour and minute. Distinctive red "Railway Station clock" type second hands with "eye" on slave clock with synchronous second hands (**74**.xxx) only.

No second hands on other clock types.



Outdoor analog double face

Type series
<b>752</b>

















3.890.-



#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Clock type	Face diameter ► Mounting ▼		€ each	800 mm Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>		52. <b>752</b> .622 52. <b>752</b> .623	•	52. <b>752</b> .822 52. <b>752</b> .823	3,610 3,610
Slave clock, minute pulse 1260 V		71. <b>752</b> .622 71. <b>752</b> .623	•	71. <b>752</b> .822 71. <b>752</b> .823	3,120 3,120
Slave clock, minute pulse 12/24 V, synchronous second hand 230 VAC/50 H		74. <b>752</b> .622 74. <b>752</b> .623		74. <b>752</b> .822 74. <b>752</b> .823	4,120 4,120
Telegram slave clock, <i>DCFport24</i> , 24 V <sup>2</sup>		81. <b>752</b> .622 81. <b>752</b> .623	•	81. <b>752</b> .822 <sup>2)</sup> 81. <b>752</b> .823 <sup>2)</sup>	3,480 3,480
RC telegram slave clock, AirPort24, mains operated 230 VAC, with outage reserve		85. <b>752</b> .622 85. <b>752</b> .623	•	85. <b>752</b> .822 85. <b>752</b> .823	3,710 3,710
NTP system clock (NTP client),	wall	91. <b>752</b> .622	2,820	91. <b>752</b> .822	3,890

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case with lugs for suspension by ropes or chains (indoor mounting only)	-30	on request
Ceiling suspension extended length, cir. 480 mm	-32	195
Pole adapter for lateral mounting by means of stainless steel tightening straps (not included)	-35	125
Pole adapter for central mounting (mounting bracket, length cir. 300 mm)	-36	on request
Light-sensitive switch for internal illumination	-44	250
Custom logo on clock face	-47	on request
Face with Arabic numerals instead of DIN bar markings	-48	on request
Unbreakable Makrolon® front glasses instead of Plexiglas® (for 670 mm diameter clocks only)	-56	590

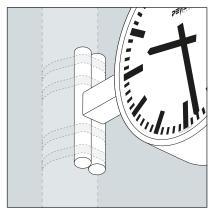
Options – just as you like them ... These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

synchronisation by LAN, PoE3

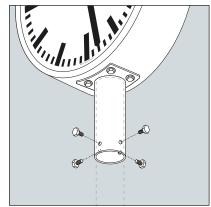


power supply. NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by

800 mm face diameter require a 230 VAC



Pole adapter for lateral mounting by means of stainless steel tightening straps, suffix -35



**2.820.-** 91.**752**.823

Pole adapter for central mounting, suffix -36



## Outdoor Clocks (also suitable for large halls) single face, square, backlighted by LED



Outdoor analog single face

**760** 





















Extraordinarily sturdy high quality industrial grade outdoor clocks, also suitable for indoors. Solid workmanship, backlighted by LED, weather protected case (IP 54/EN 60 529).



Clocks of this type series with Arabic numerals bear the Item Number suffix -48.



- cir. 442 x 442 mm
- cir. 642 x 642 mm
- cir. 842 x 842 mm

weatherproof aluminium case. Outside 2-layer tempered enamel, light grey (RAL 7035). Optionally custom enamelled, at a surcharge. Extraordinarily solid construction, incl. light fitting. Absolutely corrosion resistant and weatherproof. Protection grade IP 54 (EN 60529).

#### Mounting

On-wall mounting as standard. At a surcharge, a wall or ceiling mounting bracket or a pole adapter are available as options

#### Front glass

Shock-resistant, highly transparent 4 mm Plexiglas® XT. For locations prone to impact or public areas, unbreakable Makrolon® (polycarbonate) front glass is available as an option.

#### Face (backlighted)

Acrylic plastic, white, translucent, 5 mm thick, large black DIN bar markings (or black Arabic numerals as an option). Very distinctive and easy doubt-free reading even over longer distances. Face printed according to DIN 41 049.

#### Illumination

Backlighting by durable, maintenance-free light-emitting diodes (LEDs), operating voltage 230 VAC/50...60 Hz. As an option, a light-sensitive switch can be included.

#### Hands

Pointed black DIN bar-type hands (DIN 41092) for hour and minute. Distinctive red "Railway Station clock" type second hand with "eye" on slave clock with synchronous second hand (74.xxx) only.

No second hand on other clock types.



Outdoor analog single face

Type series
760
100





















# clocks DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality

DCF77 aerad (IP 6B). Ihus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA

master clock (see from page 172 on).

PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NT

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Face dimensions	400 x 400 mm		600 x 600 mm		800 x 800 mm	ı
Clock type	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	52. <b>760</b> .421	1,750	52. <b>760</b> .621	2,110	52. <b>760</b> .821	2,750
Slave clock, minute pulse 1260 V	71. <b>760</b> .421	1,260	71. <b>760</b> .621	1,620	71. <b>760</b> .821	2,260
Slave clock, min. pulse 12/24 V, synch. second hand 230 VAC/50 Hz	74. <b>760</b> .421	1,890	74. <b>760</b> .621	2,250	74. <b>760</b> .821	2,890
Telegram slave clock, DCFport24, 24 V <sup>2)</sup>	81. <b>760</b> .421	1,620	81. <b>760</b> .621	1,980	81. <b>760</b> .821 <sup>2)</sup>	2,620
RC telegram slave clock, <i>AirPort24</i> , mains operated 230 VAC, with outage reserve	85. <b>760</b> .421	1,850	85. <b>760</b> .621	2,210	85. <b>760</b> .821	2,850
NTP system clock (NTP client), synchronisation by LAN, PoE <sup>3)</sup>	91. <b>760</b> .421	2,030	91. <b>760</b> .621	2,390	91. <b>760</b> .821	3,030

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case with lugs for suspension by ropes or chains (indoor mounting only)	-30	on request
Wall or ceiling mounting bracket for single face outdoor clocks, standard length 70 mm	-34	on request
Light-sensitive switch for internal illumination	-44	250
Custom logo on clock face	-47	on request
Face with Arabic numerals instead of DIN bar markings	-48	on request
Unbreakable Makrolon® front glass instead of Plexiglas® (for 842 x 842 mm clocks only)	-55	395

#### Options - just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> DCFport24 pulse telegram slave clocks with 800 x 800 mm face dimensions require a 230 VAC power supply.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Outdoor Clocks** (also suitable for large halls) double face, square, **backlighted by LED**



Outdoor analog double face

Type series 762

**4** 230V Quar

















Extraordinarily sturdy high quality industrial grade outdoor clocks, also suitable for indoors. Solid workmanship, backlighted by LED, weather protected case (IP 54/EN 60 529).



Clocks of this type series with Arabic numerals bear the Item Number suffix **-48**.



- cir. 442 x 442 mm
- cir. 642 x 642 mm
- cir. 842 x 842 mm

weatherproof aluminium case. Outside 2-layer tempered enamel, light grey (RAL 7035). Optionally custom enamelled, at a surcharge. Extraordinarily solid construction, incl. light fitting. Absolutely corrosion resistant and weatherproof. Protection grade IP 54 (EN 60529).

#### Mounting

Choice of wall or ceiling mounting, standard length cir. 70 mm.

#### Front glasses

Shock-resistant, highly transparent 4 mm Plexiglas® XT. For locations prone to impact or public areas, unbreakable Makrolon® (polycarbonate) front glasses are available as an option.

#### Faces (backlighted)

Acrylic plastic, white, translucent, 5 mm thick, large black DIN bar markings (or black Arabic numerals as an option). Very distinctive and easy doubt-free reading even over longer distances. Faces printed according to DIN 41 049.

#### Illumination

Backlighting by durable, maintenance-free light-emitting diodes (LEDs), operating voltage 230 V AC/50...60 Hz. As an option, a light-sensitive switch can be included.

#### Hands

Pointed black DIN bar-type hands (DIN 41092) for hour and minute. Distinctive red "Railway Station clock" type second hands with "eye" on slave clock with synchronous second hands (74.xxx) only.

**2,820.-** 91.**762**.822

**2,820.-** 91.**762**.823

No second hands on other clock types.



Outdoor analog double face

Type series 762





















clocks

3,890.-

3.890.-





DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24

PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

#### NT

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Face dim	ensions 🟲	400 x 400 mr	n	600 x 600 mn	n	800 x 800 mn	1
Clock type Mo	ounting <b>V</b>	Item No.	€ each	Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 VAC <sup>1)</sup>	wall	52. <b>762</b> .422	2,240	52. <b>762</b> .622	2,540	52. <b>762</b> .822	3,610
	ceiling	52. <b>762</b> .423	2,240	52. <b>762</b> .623	2,540	52. <b>762</b> .823	3,610
Slave clock, minute pulse 1260 V	wall	71. <b>762</b> .422	1,750	71. <b>762</b> .622	2,050	71. <b>762</b> .822	3,120
	ceiling	71. <b>762</b> .423	1,750	71. <b>762</b> .623	2,050	71. <b>762</b> .823	3,120
Slave clock, minute pulse 12/24 V,	wall	74. <b>762</b> .422	2,750	74. <b>762</b> .622	3,050	74. <b>762</b> .822	4,120
synchronous second hand 230 V AC/50 Hz	ceiling	74. <b>762</b> .423	2,750	74. <b>762</b> .623	3,050	74. <b>762</b> .823	4,120
Telegram slave clock, DCFport24, 24 V <sup>2</sup>	wall	81. <b>762</b> .422	2,110	81. <b>762</b> .622	2,410	81. <b>762</b> .822 <sup>2)</sup>	3,480
	ceiling	81. <b>762</b> .423	2,110	81. <b>762</b> .623	2,410	81. <b>762</b> .823 <sup>2)</sup>	3,480
RC telegram slave clock, AirPort24,	wall	85. <b>762</b> .422	2,340	85. <b>762</b> .622	2,640	85. <b>762</b> .822	3,710
mains operated 230 VAC, with outage reserve	ceiling	85. <b>762</b> .423	2,340	85. <b>762</b> .623	2,640	85. <b>762</b> .823	3,710

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case with lugs for suspension by ropes or chains (indoor mounting only)	-30	on request
Light-sensitive switch for internal illumination	-44	250
Custom logo on clock face	-47	on request
Face with Arabic numerals instead of DIN bar markings	-48	on request
Unbreakable Makrolon® front glasses instead of Plexiglas® (for 842 x 842 mm clocks only)	-56	790

wall 91.**762**.422

ceiling 91.**762**.423

**2,520.-** 91.**762**.622

**2,520.-** 91.**762**.623

#### Options – just as you like them ...

NTP system clock (NTP client),

synchronisation by LAN, PoE3

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

<sup>&</sup>lt;sup>1)</sup> A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>&</sup>lt;sup>2)</sup> DCFport24 pulse telegram slave clocks with 800 x 800 mm face dimensions require a 230 VAC power supply.

<sup>&</sup>lt;sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **Training Clocks/Pace Clocks,** for in- and outdoors, with seconds cross, **backlighted by LED**



Indoor/ Outdoor analog single face

765



















This kind of training/pace clocks indicates split times during swim training/warm-up training. Times are taken by each swimmer individually. The 4-coloured seconds cross indicates the time elapsed, one complete turn corresponds to exactly 60 seconds.

For parallel operation of 2 training clocks, the slave clock type connected to the central control unit 10.430.100 is recommended. Thus an identical display (synchronous time) is always guaranteed on all training clocks con-

> Diagram shows 2 training clocks 71.**765**.611 with control unit 10.430.100

NYM 3 x 1.5 mm 220...230 VAC/ 50...60 Hz mains 50...60 Hz mains recommended wire: NYM 3 x 1.5 mm<sup>2</sup> 220...230 VAC/ 50...60 Hz mains

recommended wire:

recommended wire for clock movement operation: J-Y(ST)Y 2x2x0.8 mm<sup>2</sup>

> control unit 10.430.100 for on-wall mounting,

with on/off switch

**Training clocks** resistent to thrown balls for indoors see pages



92 and 93.



cir. 642 x 642 mm weatherproof aluminium case. Outside 2-layer tempered enamel, light grev (RAL 7035), Optionally custom enamelled, at a surcharge. Extraordinarily solid construction, incl. light fitting. Absolutely corrosion resistant and weatherproof. Protection grade IP 54 (EN 60529).

#### Mounting

On-wall mounting as standard. Wall or ceiling mounting bracket available at a surcharge (option).

#### **Clock types**

- Quartz movement, mains operated 230 VAC, fixed power supply.
- Slave movement, pulse operated 24 V To be operated by control unit 10.430.100 only.

Recommended for synchronized, parallel operation of 2 training clocks/ pace clocks 71.765.611 in securely fixed position.

#### Face (backlighted)

Acrylic plastic, white, translucent, 5 mm thick, with red/black second bars and black numerals. Very distinctive and easy doubtfree reading even over longer distances. Minimum reading distance 30 m.

#### Illumination

Backlighting by durable, maintenance-free light-emitting diodes (LEDs), operating voltage 230 VAC/50...60 Hz. As an option, a light-sensitive switch can be included.

Acrylic plastic 4-coloured cross, translucent, intervals in second cycles.

#### Front glass

Shock-resistant, highly transparent 4 mm Plexiglas® XT.



Indoor/ Outdoor analog single face























1
2

Technical data	
Operating power (quartz clock type, mains operated)	220230 VAC
Operating power (slave clock type, pulse operated)	24 V second pulses
Operating power (illumination)	230 VAC/50-60 Hz
Intervals	second cycles
Dial sections	060
Reading distance	min. 30 m

Clock type	Item No.	€ each
Quartz clock, mains operated 230 VAC	42. <b>765</b> .611	2,250
Slave clock, minute pulse 24 V (second cycles)	71. <b>765</b> .611	2,050

Accessory	Item No.	€ each
Control unit for 2 training clocks 71.765.611, operating power 220230 VAC/5060 Hz, ON/OFF switch	10. <b>430</b> .100	349

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case with lugs for suspension by ropes or chains (indoor mounting only)	-30	on request
Wall or ceiling mounting bracket for single face outdoor clocks, standard length 70 mm	-34	on request
Light-sensitive switch for internal illumination	-44	250
Custom logo on clock face	-47	on request

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

#### **Function**

The (swim) training/pace clock can be used by any number of swimmers simultaneously.

The crossed second hands show the time elapsed in seconds.

The swimmer will wait for a maximum of 14 seconds until the next colour of the four second hands ("his" colour) reaches the 12-o'clock-position and will then memorise the colour of "his" hand. Upon reaching the edge of the pool (after 1 or 2 laps) the time elapsed can be read according to the position of "his" second hand.

> **Training clocks** resistent to thrown balls

for indoors see pages 92 and 93.





## Outdoor Clocks (also suitable for large halls) four faces, backlighted



Outdoor analog four faces





















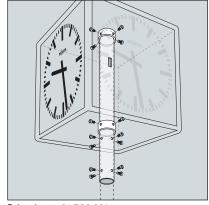






Extraordinarily sturdy high quality industrial grade outdoor clocks. Also suitable for indoors, e.g. for large halls. Solid workmanship, backlighted, weather protected case (IP54/EN 60529).

We provide a ready-to-install product which can be mounted and connected without problem. The clock contains finished electrical wiring as well as mechanical fixing points for mounting. On request, we will be happy to support you with additional mounting instructions and other information.



Pole adapter 01.**790**.001 As a minimum, the pole must be inserted up to the floor plate of the clock case. For optimum stability, however, the pole should reach as far as the top panel of the clock case.



Different face and hand variations are possible (option).

**Clock cubes** for indoor use see pages 84 ... 87.





- cir. 780 x 780 x 780 mm weight cir. 80 kg
- cir. 980 x 980 x 980 mm weight cir. 100 kg

Weatherproof metal case, four faces, including light fitting. Frame of extruded hollow aluminium mouldings, neatly mitred at all corners. Clock faces are attached to frame with hidden stainless steel hinges and inspection latches for maintenance access. Interior of case permanently ventilated to avoid condensation. Outside surface anodised in silver (E6/EV1) as standard, or, at a surcharge, custom enamelled (option).

#### Mounting

As standard, no mounting fixtures are included in delivery shipment. Optional mounting accessories:

- A reinforced floor plate for mounting on solid ground
- A pole adapter for centred mounting, diameter adapted to the existing pole. The adapter extends from the bottom of the clock case's top panel as far as 300 mm below the floor plate of the case. The pole may be inserted into the inside of the clock case at will.

The clock case is designed for wind loads of up to cir. 0.5 KN/m<sup>2</sup> (standard value). Actual wind loads depend on the individual location and have to be accounted for locally. This considered, a sufficiently firm footing is to be made sure.

#### Front glasses

German safety standard ESG), embedded in permanently elastic, weatherproof special gaskets.

#### Faces (backlighted)

Acrylic plastic, translucent, white, 5 mm, large DIN black bar markings. Very distinctive and easy doubt-free reading even over longer distances. Other face and hand variations are available on request (options). Faces printed according to DIN 41 049.

#### Illumination

Fluorescent tubes for 230 VAC/50...60 Hz are installed and wired as standard. As an option, LED tubes can be included instead of fluorescent tubes.

#### Hands

Pointed black DIN bar-type hands (DIN 41902) for hour and minute. Distinctive red "Railway Station clock" type second hands with "eye" on slave clock with synchronous second hands (**74**.xxx) only.



Outdoor analog four faces





















clocks DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

#### PEWETA DCFport24 PEWETA DCFport24 slave

clocks require a PEWETA master clock (see from page 172 on).

#### PEWETA AirPort24

PEWETA AirPort24 slave clocks require an AirPort24 transmitter or repeater respectively (see page 177).

NTP system clocks require a PEWETA master clock (see from page 172 on) or an NTP time server (see page 179).

Single-pane safety glass (according to

	Face dimensions ►	600 x 600 mm		800 x 800 mm	ı
Clock type		Item No.	€ each	Item No.	€ each
DCF77 radio controlled clock, mains operated 230 V AC 1)		52. <b>790</b> .626	6,230	52. <b>790</b> .826	7,990
Slave clock, minute pulse 1260 V		71. <b>790</b> .626	5,690	71. <b>790</b> .826	7,450
Slave clock, min. pulse 12/24 V, synch. second hand 230 VAC/50 Hz		74. <b>790</b> .626	7,470	74. <b>790</b> .826	9,230
Telegramm-Nebenuhr, DCFport24, 24 V, Netzbetrieb 230 V <sup>2)</sup>		83. <b>790</b> .626	6,100	83. <b>790</b> .826	7,860
Funktelegramm-Nebenuhr, AirPort24, Netzbetrieb 230 V, mit Gangreserve		85. <b>790</b> .626	6,335	85. <b>790</b> .826	8,095
NTP-Systemuhr (NTP client), Synchronisation über LAN, PoE <sup>3)</sup>		91. <b>790</b> .626	6,460	91. <b>790</b> .826	8,220

Accessories	Item No.	€ each
Pole adapter, length outside case 300 mm, for mounting on top of existing pole (measurements are to be coordinated)	01. <b>790</b> .001	890
Reinforced floor plate, necessary for on-site mounting	01. <b>790</b> .003	350
Shipment packing (sturdy wood crate/planking)	01. <b>790</b> .004	on request

Options	Suffix	Surcharge € each
Case custom enamelled	-10	on request
Case with lugs for suspension by ropes or chains (indoor mounting only)	-30	475
Faces with nostalgic hands and Roman numerals (instead of bar markings with bar-type hands)	-24	on request
Backlighting by LED tubes (instead of fluorescent tubes)	-43	650
Light-sensitive switch for internal illumination	-44	390
Custom logo on clock face	-47	on request

#### Clocks of this type series are also available with Arabic numerals.

To order, replace the 7th digit "2" of the Item No. by "1", Example: 71.790.616. Faces with Arabic numerals.

#### Options – just as you like them ...

These clocks are available optionally with customised features at the surcharges as listed. Just pick your option(s) and add the appropriate suffix(es) to the Item No.

#### Security advice:

Fulfilment of local building standards and other pertinent safety regulations as well as preparation of the mounting surface or load bearing calculations for the foundation and wind loads on the supporting structure are always the responsibility of the customer and/or his architect/building contractor.

**Clock cubes** for indoor use

see pages 84 ... 87.



<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial is included in delivery shipment.

<sup>2)</sup> DCFport24 pulse telegram slave clocks require a 230 VAC power sup-

<sup>3)</sup> NTP system clocks of "PoE" type require a PoE (Power over Ethernet) power supply. Appropriate hardware has to be supplied by customer.



# **LED Digital Displays,** outdoor showing the time, alternating with date and temperature



**Digital displays** single-sided outdoor























Large, very sturdy digital displays with distinct, double-row LEDs, optimum readability, even at longer distances.

For sports applications, these LED digital displays can also be used as stopwatches. Besides basic count-up and count-down functions a complete training program with various cycles and breaks that starts automatically when triggered can be programmed using the infrared remote control, included in delivery shipment.







Examples show time, date, temperature, and stopwatch modes







cir. 830 x 320 x 90 mm (cipher height 160 mm)

cir. 1230 x 400 x 90 mm (cipher height 250 mm) very sturdy aluminium case, enamelled black.

Protection grade IP 54 (EN 60529).

#### Resistance to thrown balls

LED digital displays of this type series are resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3 and thus are suitable for school yards and sporting facilities.

#### Mounting

On-wall mounting by means of 4 angular metal brackets (included in delivery shipment).

#### Front glass

Flat shock-resistant plastic glass.

#### LED digital display

7-segment display technology, colour red, automatic brightness control. 4-digit display with double-row LEDs showing hours and minutes, date, and temperature, either permanently or alternating, intervals adjustable.

Operating voltage 230 VAC/50..60 Hz.

#### Infrared remote control unit

All settings and the operation of the stopwatch mode are triggered by a wireless infrared remote control unit, included in delivery shipment.

#### Stopwatch mode

This LED digital display can also be used as a stopwatch in count-up, count-down, and training modes. The 4-digit LED display shows minute and second readings. Operation by the wireless infrared remote control unit included.

Functions possible:

- **count-up** with split times
- count-down with indication of initial value
- training with adjustable number and duration of cycles and breaks.



**Digital displays** single-sided outdoor























#### DCF77 radio controlled clocks

DCF77 radio controlled clocks of this type series will be supplied including a remotable DCF77 aerial (IP 68). Thus, optimum reception quality can be achieved regardless of the final placement of the clock itself. However, DCF77 radio controlled clocks will only function correctly within a radius of approx. 1,500 km around Mainflingen (50 km east of Frankfurt/M.).

PEWETA DCFport24 PEWETA DCFport24 slave clocks require a PEWETA master clock (see from page 172 on).

#### Further models

of this type series with different cipher heights and/or with a 6-digit display (hh:mm:ss) are available on request.

Technical data		Cipher height 160 mm	Cipher height 250 mm
Case	colour	black (RAL 9005)	black (RAL 9005)
	dimensions (WxHxD)	cir. 830 x 320 x 90 mm	cir. 1230 x 400 x 90 mm
	weight	cir. 10 kg	cir. 15 kg
LED display	cipher height hours/minutes	cir. 160 mm	cir. 250 mm
	reading distance	cir. 6070 m	cir. 90100 m

	Cipher height ▶	160 mm		250 mm	
Туре	Operating voltage ▼	Item No.	€ each	Item No.	€ each
Quartz clock	230 VAC	42. <b>810</b> .161	2,595	42. <b>810</b> .251	3,395
DCF77 radio controlled clock <sup>1)</sup>	230 VAC	52. <b>810</b> .161	2,895	52. <b>810</b> .251	3,695
Telegram slave clock, DCFport24, 24 V	230 V AC	83. <b>810</b> .161	2,695	83. <b>810</b> .251	3,495

<sup>&</sup>lt;sup>1)</sup>A remotable DCF77 receiving aerial is included in delivery shipment.



# **LED Soccer Score Display Board,** outdoor showing game time and time respectively



**Digital displays** single-sided outdoor

830















7-segment LED technology score display board, cipher height 460 mm, reading distance up to cir. 180 m. Suitable for soccer, rugby, and lawn hockey.



see pages 142 ... 148.



cir. 2500 x 1800 x 90 mm consisting of 2 modules. Very sturdy aluminium cases, enamelled black. Protection grade IP 54 (EN 60529).

#### Resistance to thrown balls

The soccer score display board of this type series is resistant to thrown balls in accordance with German standards VDE 0710, part 13:1981-05 and DIN 18032, part 3 and thus are suitable for outdoor sporting facilities.

#### Mounting

On-wall mounting by means of 4 angular metal brackets (included in delivery shipment). Rear-side mounting bracket for attachment to an I-beam or pole pipe available on request.

#### Front glass

Flat shock-resistant plastic glass.

#### **HOME/GUEST** marking

Permanent marking by self-adhesive film, available in various languages.

#### Score display

One 2-digit display per team, 7-segment triple-row LED technology, cipher colour red, cipher height 460 mm. Manual brightness control in 9 steps triggered by the control panel.

#### Game time display

4-digit display with 7-segment triple-row LED technology, cipher colour red, cipher height 460 mm, showing game time in minutes and seconds during a game. Real time display showing hours and minutes when no game is going on possible. Quartz technology (DCF77 receiving aerial or time display interface to import the DCFport24 pulse telegram from a PEWETA master clock available as accessories).

#### Scope of delivery

- 1 control panel, multi-lingual, transfer by radio, frequency 868 .. 869 MHz (standard), or wire-based (option), with LCD display and keyboard. Programs for soccer, rugby, and lawn hockey stored
- 1 wall plug adapter for charging the rechargeable batteries of the control panel
- 1 transport case (cir. 355x255x86 mm) to safely store control panel and plug adapter.

#### Further models

of this type series with 250 mm LED cipher height for small sports facilities or with LED text display for team names or messages in moving-script-method available on request.

wireless 868869 MHz
cir. 2500 x 1800 x 90 mm
polycarbonate treated for low reflectivity
460 mm
cir. 180 m, view angle cir. 160°
cir. 85 kg
mains 220230 V AC/5060 Hz

Туре	Score display	Item No.	€ each
Display board with (game) time display	2 digits per team	24. <b>830</b> .422	7,990
Accessories		Item No.	€ each
DCF77 receiving aerial (IP65) for precise local time change-over of summer/winter time	and fully automatic	03. <b>925</b> .185	295.–
Time display interface to import the <i>DCFport24</i> pu from a PEWETA type series 921 master clock	lse telegram	04. <b>676</b> .000	95

#### Safety advice:

Fulfilment of local building standards and other pertinent safety regulations as well as preparation of the mounting surface or load bearing calculations for the foundation and wind loads on the supporting structure are always the responsibility of the customer and/or his architect/building contractor.



**Digital displays** single-sided outdoor



























Clock systems, as compared to stand-alone clocks, have one main advantage: all connected slave clocks display *identical* time. The "source of time" for this time display service always is the Master Clock.

#### Master Clock/ Signalling Master Clock

Using an internal quartz time base, the maximum error is cir.  $\pm 0.1$  sec. per day. If a radio receiver (DCF77 or GPS) is connected, the Master Clock will evaluate the time-and-date signals received, check for and correct any possible discrepancies and then transmit the updated time information as pulses (minute-, half minuteor second-pulses) or as a telegram (e.g. PEWETA DCFport24 telegram by wire, AirPort24 wireless telegram) to all connected slave clocks. Summer/ winter time change-over is performed automatically. If the Master Clock is required, in addition to transmitting the time-and-date information, to effect switching operations, such as activation of optical and/or acoustic signalling devices to indicate start of work or break periods, in industry or

at schools, master clocks can be equipped with additional signal (switching) outputs. These output terminals are free-floating and capable of controlling also other external equipment, such as lighting, air conditioning, ventilation, heating or security alarm systems as well as many others.

#### **Conventional pulse**

Conventional slave clocks are advanced by alternating polarity pulses (minute-pulse or second-pulse) one time unit at a time. 4-core wire is recommended for the slave clock control line(s), recommended type is J-Y(ST)Y 2x2x0,8 mm², but existing 2-wire lines may continue in use.

#### DCFport24 pulse telegram

PEWETA slave clocks with *DCFport24* input are controlled by a wire-transmitted DCF77 pulse (time and date) telegram. Their advantages over conventional slave clocks are:

- extremely easy "plug-and-play" installation
- no need to watch for control line polarity
- quick initiation by automatic, extremely rapid self-adjustment to current time, regardless of position of hands on analog clocks at delivery

- Central second hand(s) available as standard for clock faces up to 400 mm diameter.
- When changing over from conventional pulse control to the PEWETA DCFport24 pulse telegram, existing 2-wire lines or networks may continue in use. For new installations, use of 4-core wire type J-Y(ST)Y 2x2x0,8 mm² is recommended.
- There is a possibility to use existing conventional slave clocks simultaneously with new PEWETA DCFport24 pulse telegram slave clocks. To make use of this possibility, a PEWETA Master Clock series 920 with 2 slave clock lines is required as a minimum. Parallel operation on a single slave clock line requires a PEWETA Master Clock series 921. Type of pulse and/or telegram may be assigned to each slave clock line individually.

#### AirPort24 radio telegram (RF)

The PEWETA AirPort24 system enables a

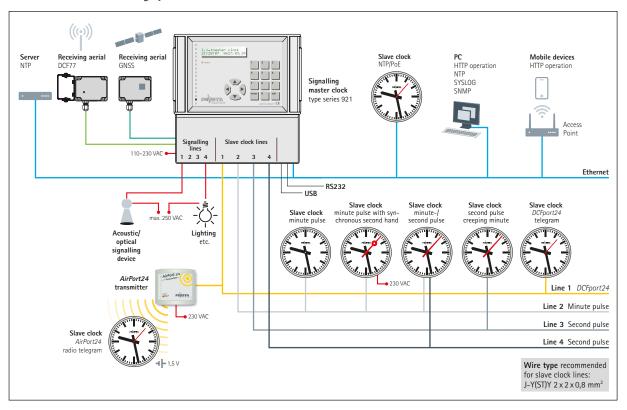
 wireless transmission of time and date information to all AirPort24 slave clocks (868..869 MHz frequency band).

For more information please ask for our data sheet.



## **Wiring Diagram**

## for PEWETA type series 921 Master Clock





Wiring diagram for type series 921 Master Clock

## Slave clocks of the following types may be operated by a PEWETA type series 921 Master Clock:

Minute Pulse, 12 ... 60 V

The polarity alternating pulse is distributed by a two-wire line. In analog clocks, the minute pulse also is the power supply. Before initiation, all slave clocks must be manually pre-set to indicate the starting time. All clocks must be connected in the same polarity.

Minute and Second Pulse, 12/24 V
To control slave clocks with minute/second pulse movements, a Master Clock with a minimum of 2 slave clock lines is required. In addition to the minute pulse (see above), a polarity alternating second pulse is transmitted on a separate (!) 2-wire line. In analog clocks, the minute and second pulse also is the power supply. Before initiation, all slave clocks must be manually pre-set to indicate the starting time. All clocks must be connected in the same polarity.

#### Minute Pulse 12/24 V, Synchronous Second, 230 V AC/50...60 Hz

Same function as minute pulse 12...60 V, however, the creeping second hand is powered by 230 VAC/50...60 Hz mains and is synchronised to the polarity alternating minute pulse at every full minute.

## Second Pulse 12/24 V with Creeping Minute

To control slave clocks with a second pulse only movement a second pulse with a 12-hour cycle is required. The polarity alternating second pulse is transmitted by a 2-wire line, the creeping minute hand is "pulled along". In analog clocks, the second pulse also is the power supply. Before initiation, all slave clocks must be manually pre-set to indicate the starting time. All clocks must be connected in the same polarity.

#### DCFport24 Telegram

An interference-protected DCF77 telegram (12/24 V) is transmitted by a 2-wire line. All clocks connected to the system will automatically adjust to current time (plug-and-play), independent of polarity and position of hands in analog clocks. No manual pre-setting of time is required. For analog clocks and LCD digital clocks, this also provides the operating power. Analog clocks with faces up to 400 mm diameter always come equipped with a second hand.

The *DCFport24* is also capable of providing power for a limited number of LED digital clocks, otherwise, 230 VAC/50...60 Hz (for other voltages, please call us) mains power is required.

For further information please ask for our data sheet.

#### AirPort24 Radio Telegram

To control slave clocks by AirPort24 radio telegram, at least 1 AirPort24 transmitter. and if conditions dictate, 1 AirPort24 repeater are required, in addition to a PEWETA type 921 master clock. A wire network, as in conventional slave clock systems, is not required, complete time and date information is distributed interference-proof by RF transmission (in the 868 ... 869 MHz UHF band) throughout a radius of cir. 250 m to all slave clocks located in this reception area. All clocks self-adjust to current time immediately and fully automatically (plugand-play). Analog clocks may operate either on 1.5 V battery power or 230 VAC/50...60 Hz mains, LED digital clocks always need 230 VAC/50...60 Hz (other voltages/cycles on request) mains power. Analog clocks with faces up to 400 mm diameter always come equipped with a second hand.

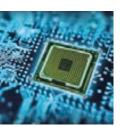
For further information about the AirPort24 radio telegram please ask for our data sheet.

Different clock drive modes may be used in parallel on different slave clock lines.



## Master Clock/Signalling Master Clock

DCF77, GPS or LAN/NTP controlled



Master Clocks/ Signalling **Master Clocks** and extras

921



























#### Typical performance data

Control of slave clocks

- 1, 2 or 4 slave clock lines
- Line voltage 12 V or 24 V
- Line mode may be selected as alternating polarity minute pulse
- alternating polarity half-minute
- alternating polarity second pulse
- DCFport24 telegram
- DCFport24 and minute pulse, parallel operation of conventional slave clocks and DCFport24 telegram slave clocks on a single slave clock line.
- Pulse duration is adjustable from .2 sec to 9.9 sec.
- Total output power is 1 A at 24 V line voltage to control up to
- 160 conventional slave clocks (at 6 mA/24 V each) or up to
- 50 PEWETA *DCFport24* telegram slave clocks, expandable by using a pulse amplifier (Item Number 10.**930**.124), see page 176.
- Optional power outage reserve, selectable for individual slave clock lines. A rechargeable 12 V/1.5 Ah NiMh battery provides for continued operation of the master clock and all connected clocks in case of a mains power outage.

- Upon **return of mains power** (e. g. after a mains outage) all connected clocks immediately readjust to current time.
- Slave clock lines with voltage and current surveillance. Mains power outage, overload (or low voltage when operating in memory mode) in the clock control line will cause an alarm by red LED as well as an alarm flag in the display and messages via network as SYSLOG or SNMP.
- Slave clocks will automatically be stopped when low voltage is detected.
- Secondary Master Clocks for expanding the clock system may be synchronised by the DCFport24 output.
- For the control of world time displays, freely configurable and pre-programmed zone times are included.
- 1 RS232 serial interface (output) is available for continuous transmission of time-and-date information in ASCII

#### Signalling device

- 0, 2 or 4 programmable signal contacts (switch points/free-floating contacts) capable of 250 VAC/2 A
- Choice of program run for a day, a week
- 300 switch actions programmable
- ON/OFF switching or pulse action as well as suppress and release functions

- Fastest possible switching sequence:
- Fixed-program calendar through 2099
- Data retention on power outage > 5 years.

#### Network

- Ethernet port (RJ45)
- Easy set-up by web browser. Program slave clock lines, switch actions and system settings from a PC, a tablet or a smartphone
- Ethernet IEEE 802.3 10/100BASE-T: HTTP, NTP, (S)NTP, DHCP, SYSLOG,

#### Additional performance data

- Radio control by DCF77 (option)
- Radio control by GNSS/GPS-GLONASS-GALILEO (option)
- NTP/Network Time Protocol input terminal (RJ45) for synchronisation by LAN
- Alphanumeric LCD display for userfriendly dialog-type navigation, timeand-date readout and alarm indications
- PIN-coded keyboard lock
- A temperature compensated crystal oscillator (TCXO) ensures a deviation of less than 0.1 seconds/day during autonomous operation
- USB 2.0 Type A port for software updates by USB stick.





Technical dat	a	
Case	width x height xdepth	cir. 236 x 239 x 85 mm
	material	ABS
	colour	RAL 7035 (light grey)
	weight	cir. 2.5 kg (incl. power outage batteries)
Milieu	VDE classification	-
	protection grade (EN 60529)	IP 32
	surrounding temperature	0°C up to 40°C
Electrical	mains voltage	220230 V AC/5060 Hz
values	power consumption	1.538 VA
	line voltage/pulse mode	12 V or 24 V
Total power	24 V minute pulse	1000 mA max. (for up to 160 slave clocks at 6 mA)
output	24 V second pulse	500 mA max. (for up to 80 slave clocks at 6 mA)
	DCFport24 telegram 24 V	600 mA max. (for up to 50 slave clocks at 12 mA)
	DCFport24+ minute pulse 24 V	600 mA max. (for up to 50 slave clocks at 12 mA)
Network	topology	Ethernet IEEE 802.3
	bit rate	10/100BASE-T
	connector	RJ45
	network configuration	DHCP/manually

Technical dat	a	
Case	width x height xdepth	cir. 236 x 239 x 85 mm
	material	ABS
	colour	RAL 7035 (light grey)
	weight	cir. 2.5 kg (incl. power outage batteries)
Milieu	VDE classification	I
	protection grade (EN 60529)	IP 32
	surrounding temperature	0°C up to 40°C
Electrical	mains voltage	220230 V AC/5060 Hz
values	power consumption	1.538 VA
	line voltage/pulse mode	12 V or 24 V
Total power	24 V minute pulse	1000 mA max. (for up to160 slave clocks at 6 mA)
output	24 V second pulse	500 mA max. (for up to 80 slave clocks at 6 mA)
	DCFport24 telegram 24 V	600 mA max. (for up to 50 slave clocks at 12 mA)
	DCFport24+ minute pulse 24 V	600 mA max. (for up to 50 slave clocks at 12 mA)
Network	topology	Ethernet IEEE 802.3
	bit rate	10/100BASE-T
	connector	RJ45
	network configuration	DHCP/manually

Туре	Number of slave clock lines	Number of signalling contacts	Power outage reserve	Item No.	€ each
	CIOCK IIIIES				
Master Clock	1	none	no	10. <b>921</b> .010	829
	1	none	yes	10. <b>921</b> .110	989
Signalling Master Clock	1	2	no	10. <b>921</b> .012	1,025
	1	2	yes	10. <b>921</b> .112	1,185.–
Master Clock	2	none	no	10. <b>921</b> .020	930
	2	none	yes	10. <b>921</b> .120	1,090
Signalling Master Clock	2	2	no	10. <b>921</b> .022	1,140
	2	2	yes	10. <b>921</b> .122	1,300
	2	4	no	10. <b>921</b> .024	1,360
	2	4	yes	10. <b>921</b> .124	1,520
Master Clock	4	none	no	10. <b>921</b> .040	1,160
	4	none	yes	10. <b>921</b> .140	1,320
Signalling Master Clock	4	4	no	10. <b>921</b> .044	1,580
	4	4	yes	10. <b>921</b> .144	1,740

Options	Suffix	Surcharge € each
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60529)	-95	695
NTP client for system time synchronisation via LAN	-98	179.–
NTP server for synchronising NTP clients via LAN incl. NTP client for system time synchronisation via LAN	-99	349



Master Clocks/ Signalling **Master Clocks** and extras

Type series	
971	



















## DCF77 Receiving Aerial for all type series 921 Master Clocks



The DCF77 time signal telegram, as transmitted by the German time signal transmitter at Mainflingen near Frankfurt/Main, is a superior time standard for synchronization and automatic change from summer to winter time of radio controlled standalone clocks and master/slave clock systems. This PEWETA DCF77 aerial provides time-and-date information to all PEWETA Master Clocks and Signalling Master Clocks.

- Weatherproof plastic case (IP 68), for indoor/outdoor mounting, dimensions (WxHxD) cir. 100x65x37 mm
- Stainless steel mounting bracket
- 5 m connecting wire (LIYCY 4x0,25 mm²) included in delivery shipment, may be extended to a maximum length of 100 m.

Туре	Item No.	€ each
External DCF77 receiving aerial (IP 68), for PEWETA Master Clocks	03. <b>925</b> .111	169



## 19" Master Clock/Signalling Master Clock

DCF77, GPS or LAN/NTP controlled



Master Clocks/ Signalling **Master Clocks** 

Type series

























and extras

921













#### Typical performance data

Control of slave clocks

- 2 or 4 slave clock lines
- Line voltage 12 V or 24 V
- Line mode may be selected as
- alternating polarity minute pulse ■ alternating polarity half-minute
- alternating polarity second pulse
- DCFport24 telegram
- DCFport24 and minute pulse, parallel operation of conventional slave clocks and DCFport24 telegram slave clocks on a single slave clock line.
- Pulse duration is adjustable from .2 sec to 9.9 sec.
- Total output power is 1 A at 24 V line voltage to control up to
- 160 conventional slave clocks (at 6 mA/24 V each) or up to
- 50 PEWETA *DCFport24* telegram slave clocks, expandable by using a pulse amplifier (Item Number 10.**930**.124), see page 176.
- Power outage reserve, selectable for individual slave clock lines. A rechargeable 12 V/1.5 Ah NiMh battery provides for continued operation of the master clock and all connected clocks in case of a mains power outage.

- Upon return of mains power (e. g. after a mains outage) all connected clocks immediately readjust to current time.
- Slave clock lines with voltage and current surveillance. Mains power outage, overload (or low voltage when operating in memory mode) in the clock control line will cause an alarm by red LED as well as an alarm flag in the display and messages via network as SYSLOG or SNMP.
- Slave clocks will automatically be stopped when low voltage is detected.
- Secondary Master Clocks for expanding the clock system may be synchronised by the DCFport24 output.
- For the control of world time displays, freely configurable and pre-programmed zone times are included.
- 1 RS232 serial interface (output) is available for continuous transmission of time-and-date information in ASCII

#### Signalling device

- 0, 2 or 4 programmable signal contacts (switch points/free-floating contacts) capable of 250 VAC/2 A
- Choice of program run for a day, a week or a year
- 300 switch actions programmable
- ON/OFF switching or pulse action as well as suppress and release functions

- Fastest possible switching sequence:
- Fixed-program calendar through 2099
- Data retention on power outage > 5 years.

#### Network

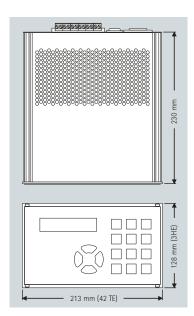
- Ethernet port (RJ45)
- Easy set-up by web browser. Program slave clock lines, switch actions and system settings from a PC, a tablet or a smartphone
- Ethernet IEEE 802.3 10/100BASE-T: HTTP, NTP, (S)NTP, DHCP, SYSLOG, **SNMP**

#### Additional performance data

- Radio control by DCF77 (option)
- Radio control by GNSS/GPS-GLONASS-GALILEO (option)
- NTP/Network Time Protocol input terminal (RJ45) for synchronisation by LAN
- Alphanumeric LCD display for userfriendly dialog-type navigation, timeand-date readout and alarm indications
- PIN-coded keyboard lock
- A temperature compensated crystal oscillator (TCXO) ensures a deviation of less than 0.1 seconds/day during autonomous operation
- USB 2.0 Type A port for software updates by USB stick.







Technical dat	a	
Case	width	42 TU (213.0 mm)
	height	3 HU (128.0 mm)
	depth	cir. 230.0 mm
	material	metal
	weight	cir. 2.7 kg (incl. power outage batteries)
Milieu	VDE classification	1
	protection grade (EN 60529)	IP 10
	surrounding temperature	0°C up to 40°C
Electrical mains voltage		220230 V AC/5060 Hz
values	power consumption	1.538 VA
	line voltage/pulse mode	12 V or 24 V
Total power	24 V minute pulse	1000 mA max. (for up to 160 slave clocks at 6 mA)
output	24 V second pulse	500 mA max. (for up to 80 slave clocks at 6 mA)
	DCFport24 telegram 24 V	600 mA max. (for up to 50 slave clocks at 12 mA)
	DCFport24+ minute pulse 24 V	600 mA max. (for up to 50 slave clocks at 12 mA)
Network	topology	Ethernet IEEE 802.3
	bit rate	10/100BASE-T
	connector	RJ45
	network configuration	DHCP/manually
	-	

network configuration DHCP/manua					DHCP/manually
	Number	Number of	Power		
Туре	of slave clock lines	signalling contacts	outage	Item No.	€ each
		Contacts			
Master Clock	2	none	yes	11. <b>921</b> .120	1,340
Signalling Master Clock	2	2	yes	11. <b>921</b> .122	1,550
Signalling Master Clock	4	4	yes	11. <b>921</b> .144	1,990
Extras				Item No.	€ each
19" rack element, 84 WU	, 3 HU			01. <b>921</b> .084	180
Blanking plate, 42 TU, 3 H	HU			01. <b>921</b> .142	25

Options	Suffix	Surcharge € each
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60 529)	-95	695
NTP client for system time synchronisation via LAN	-98	179.–
NTP server for synchronising NTP clients via LAN incl. NTP client for system time synchronisation via LAN	-99	349



Master Clocks/ Signalling **Master Clocks** and extras

Type series 921

















## DCF77 Receiving Aerial for all type series 921 Master Clocks



The DCF77 time signal telegram, as transmitted by the German time signal transmitter at Mainflingen near Frankfurt/Main, is a superior time standard for synchronization and automatic change from summer to winter time of radio controlled standalone clocks and master/slave clock systems. This PEWETA DCF77 aerial provides time-and-date information to all PEWETA Master Clocks and Signalling Master Clocks.

- Weatherproof plastic case (IP 68), for indoor/outdoor mounting, dimensions (WxHxD) cir. 100x65x37 mm
- Stainless steel mounting bracket
- 5 m connecting wire (LIYCY 4x0,25 mm<sup>2</sup>) included in delivery shipment, may be extended to a maximum length of 100 m.

Туре	Item No.	€ each
External DCF77 receiving aerial (IP 68), for PEWETA Master Clocks	03. <b>925</b> .111	169



## **Booster Amplifier**

## Wall or top hat bar mounting, or 19" rack mounting



Booster amplifier

Type series 930











When a Master Clock reaches its limits of total power output, pulse boosting amplifiers are needed for further extension of the master/slave clock system.

The short-circuit-proof slave clock line output terminals can be freely configured as

- alternating polarity minute pulse
- alternating polarity second pulse
- DCFport24 pulse telegram.

Electronic buffer memory and automatic updating circuitry cover power outages and ensure return to correct time if power returns within 24 hours.

#### Item No. 10.930.124

1 slave clock line input/output terminal 12/24 V, total output power 1.5 A at either 12 V or 24 V, capable of controlling up to

- 250 conventional slave clocks (at 6 mA/24 V)
- 125 *DCFport24* pulse telegram slave clocks (á 12 mA/24 V).

Plastic case (IP 20/EN 60529) for wall mounting or mounting on a 35 mm top hat bar. Operating voltage 230 VAC/50...60 Hz, (external power supply for mounting on a 35 mm top hat bar, included in delivery shipment).

#### Item No. 11.930.224

2 slave clock lines input/output terminals 12 V or 24 V, total output power 3 A (1.5 A per line), capable of controlling up to

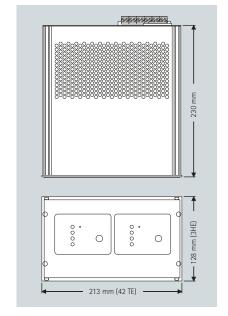
- 500 (max. 250 per line) conventional slave clocks (at 6 mA/24 V)
- 250 (max. 125 per line) DCFport24 pulse telegram slave clocks (at 12 mA/24 V).

Metal case (IP 10/EN 60 529) for mounting in 19" sub-rack, dimensions (WxHxD) 213 mm (42 WU) x 128 mm (3 HU) x 230 mm. Operating voltage 230 VAC/50... 60 Hz.



Technical data	10. <b>930</b> .124	11. <b>930</b> .224
Case	plastic case for wall mounting or mounting on top hat bar	metal case 3 HU/42 WU for mounting in sub-rack
Dimensions	cir. 100 x 75 x 125 mm	cir. 213 x 128 x 230 mm
Operating voltage	230 VAC/5060 Hz	230 VAC/5060 Hz
Pulse/line output voltage	24 V	24 V
Pulse power	1 x 1500 mA	2 x 1500 mA
minute pulse	for up to 250 slave clocks at 6 mA	for up to 500 slave clocks at 6 mA
second pulse	for up to 250 slave clocks at 6 mA	for up to 500 slave clocks at 6 mA
DCFport24 pulse telegram	for up to 125 slave clocks at 12 mA	for up to 250 slave clocks at 12 mA

Type	Item No.	€ each
Booster amplifier for wall mounting or mounting on top hat bar, 1 line output, 24 V/1.5 A	10. <b>930</b> .124	769.–
Booster amplifier in modular cassette for mounting in 19" sub-rack,	11. <b>930</b> .224	1,649





Booster amplifier for wall mounting or mounting on top hat bar

Booster amplifier in 3 HU/42 WU metal case for mounting in sub-rack



## PEWETA AirPort24 Transmitter and Repeater

Time distribution by RF transmission (868 ... 869 MHz)

As an alternative to wire-bound clock systems or to individual clocks with DCF77 aerials, the PEWETA *AirPort24* radio telegram technology permits the distribution of a time signal by radio inside or outside of buildings.

The PEWETA AirPort24 transmitter receives the time and date telegram either by wire from a PEWETA type series 921 Master Clock (see pages 172 ... 175) or as an NTP client by LAN and transmits the complete time/date information by radio (in the 868...869 MHz UHF-band) with a range of about 250 m inside buildings (up to cir. 1,000 m outdoors). All PEWETA AirPort24 radio telegram slave clocks within this range will automatically self-adjust to the current time and date indication.

Using PEWETA *AirPort24* repeaters extends the range by a further 250 m per repeater.

#### PEWETA AirPort24 transmitter

Transmitter with integrated aerial for distributing the PEWETA *AirPort24* time/date telegram to all radio telegram slave clocks within a radius of cir. 250 m inside buildings (up to cir. 1,000 m outdoors).

#### Choice of input signal:

- PEWETA DCFport24 telegram for synchronization by a PEWETA type series 921 Master Clock
- NTP for synchronization by LAN (NTP client).

#### PEWETA Airport24 repeater

Receives the PEWETA AirPort24 time/date telegram from the PEWETA AirPort24 transmitter and transmits the PEWETA AirPort24 time/date telegram to radio telegram slave clocks within a radius of cir. 250 m inside buildings (up to cir. 1,000 m outdoors).



Technical data	for transmitter and repea	ter
Frequency rang	je	868869 MHz
Output power		adjustable in steps, up to 500 mW
Operating volta	age	230 V AC/50 60 Hz (mains adapter included)
Case	material	plastic, light grey
	dimensions	cir. 199 x 178 x 57 mm
	protection grade	IP 54 (EN 60529)
PEWETA AirPo	rt24 transmitter	Item No. € each

Input: PEWETA DCFport24 pulse telegram	10. <b>940</b> .100	825
Input: NTP synchronization by LAN (NTP client)	10. <b>940</b> .200	999
	•	
PEWETA AirPort24 repeater	Item No.	€ each

#### Characteristics

- Transmission of the complete time/date telegram
- Reliable transmission of time/date telegram within a range of 250 m inside buildings, more than 1,000 m outdoors
- Unlimited number of AirPort24 telegram slave clocks within this range
   Cost-effective and simple wireless
- installation
- Capable of unlimited expansion by using repeaters
- Location of clocks at random, indoors or outdoors within transmission range
- Also suitable to expand existing, wire supported slave clock networks.





We will be happy to help with hints to planned projects and examples of specific applications. Don't hesitate to contact us. We look forward to your call or



AirPort24 transmitter and repeater

Type series 940























## **Slave Clock Control Unit**

### minute pulse 24 V output



Type series













This slave clock control unit, governed by DCF77, is capable of controlling up to four indoor/outdoor slave clock movements (at 6 mA/24 V each). Specifically suited to operate in- or outdoor clocks (e.g. with advertising) and all other single, double, or 4-faced slave clocks.

By means of a DCF77 aerial the control unit receives the exact time including the trigger signal for the automatic change-over between summer and winter time. In case of impaired reception due to local conditions pulse transmission to the slave clocks connected will be kept up. After a power outage the slave clocks connected will automatically be adjusted to match the correct time. After installation the control unit operates completely autonomous and maintenance-free.

- Alternating polarity minute pulse, 24 V
- Total output power cir. 30 mA/24 V
- Output is tolerant of circuit shorting and overload
- Electronic buffer memory and update circuitry
- Fully automatic read-in of current time upon installation or after power outage, automatic changeover between summer and winter time
- Operating voltage 230 VAC/50...60 Hz, power consumption cir. 2 VA
- Weatherproof (IP 65/EN 60529) plastic case for wall mounting indoors/outdoors or mounting on a 35 mm top hat bar. Dimensions (WxHxD) cir. 120x80x55 mm
- External DCF77 receiving aerial (IP 68/EN 60 529) with stain-less steel mounting bracket included. Connecting wire (LIYCY 4x0,25 mm²), 5 m included in delivery shipment, may be extended to a maximum length of 50 m.



Туре	Item No.	€ each
Slave clock control unit for wall mounting	10. <b>950</b> .100	459
Slave clock control unit for mounting on top hat bar	10. <b>950</b> .101	469
	•	

Options	Suffix	Surcharge € each
DCFport24 input for reading the DCFport24 telegram from a type series 921 Master Clock	-93	none
AirPort24 input for reading the time information from the AirPort24 radio telegram provided by a type series 940 AirPort24 transmitter	-94	159.–
Input for GPS radio control, incl. GPS aerial (IP 65/EN 60 529)	-95	695
NTP input for system time synchronisation via LAN	-98	298



## **NTP Time Server**

### Network time distribution

The PEWETA NTP Time Server supplies the current time and date signal, received from the German DCF77 time protocol radio transmitter or from GPS satellite, to an IT network.

This enables all "clients" within the network, like for instance PCs, servers, smart phones, telephone systems, printers, and even clocks, to synchronize with this time base. A temperature controlled crystal oscillator (TXCO) ensures accurate timekeeping even in cases of a missing DCF77 or GPS radio signal. Maximum deviation during autonomous operation is +/- 16 seconds per year (standard version). Optionally, the NTP Time Server can be equipped with a crystal oven (OCXO), which reduces the maximum deviation during autonomous operation down to  $\pm \sqrt{-1.6}$  (!) seconds per year.

For security of operation, two time servers can be used to safeguard availability on the network (system redundancy). A web-based user interface provides for simple configuration of status messages, network settings, and safety adjustments. The support for a multitude of interfaces and formats offers maximum compatibility to common networks. The server, operating under a LINUX-based operating system, ensures maintenance-free long-term usage and can be updated if necessary. On the NTP Time Server PRO version, various common ASCII time codes can be selected for output through one of the 2 serial RS232 interfaces. Individual codes can be supplied on request.

If at least three NTP Time Servers are clustered (system redundancy) they act with a shared IP address on the network. If one of the NTP Time Servers provides a deviating time signal, this device will be deactivated and its function will be taken over by the other NTP Time Servers. Clustering functionality is included in each PEWETA NTP Time Server version as standard.





Technical data	NTP Time Server PRO	NTP Time Server BASIC	
Case	19" rack mount	table housing	
Dimensions	1HU/84DU, WxHxD: 443x45x288 mm	WxHxD: cir. 335x45x240 mm	
Network interface	2×RJ45 10/100 MBit	1 x RJ45 10/100 MBit	
Serial interface	2 x RS232 (menu-guided setup)	-	
10MHz interface	BNC socket, TTL at 50 Ohm	-	
Alarm relay	1 x free-floating	-	
Status messages	via E-Mail, WinMail, SNMP, Display		
Netwerk protocols	TCP, UDP, TELNET, FTP, SSH (inkl. SFTP, SCP), HTTP, HTTPS, SYSLOG, IP v4, IP v6, DHCP, DHCP v6		
NTP protocols	NTP v2 (RFC 1119), NTP v3 (RFC 1305), NTP v4 (RFC 5905)		
NTP broadcast modes	Unicast, Manycast, Multicast, Broadcast		
SNMP	SNMPv1 (RFC 1157), SNMPv2c (RFC 1901–1908), SNMP v3 (RFC 3411–3418)		
Display	LC display, 2 x 40 characters, illuminated		
Power supply	100240 VAC (5060 Hz)		
	24 VDC (on request)	-	
Power consumption (without options)	30 watts	20 watts	

Type	Item No.	€ each
NTP Time Server PRO, including DCF77 radio receiver	11. <b>960</b> .120	4,590
NTP Time Server PRO, including GPS radio receiver	11. <b>960</b> .130	5,790
NTP Time Server BASIC, including DCF77 radio receiver	11.960.121	3,490
NTP Time Server BASIC, including GPS radio receiver	11. <b>960</b> .131	4,190
Extra	Item No.	€ each
19" mounting kit for NTP Time Server BASIC (resulting dimensions are 1 HU/84 WU)	01. <b>960</b> .100	79.–

		Surcharge
Options for NTP Time Server PRO	Suffix	€ each
Quartz oscillator OCXO, accuracy level +/- 1.6 seconds/year	-61	425
2 additional RJ45 10/100BASE-T ports	-62	590
IRIG-B output	-63	650



**NTP Time Server** 

Type series	
960	
700	





















## 19" Modular Master Clock System



Modular Master Clock System

Type series 980











The microprocessor-controlled Master Clock System is composed of modules and may be freely configured to meet any and all individual customer demands (choice of type and number of modules according to requirement). All functional units (henceforth called modules) are packaged as plug-in cassettes to fit 19" racks in free-standing or wall-mounted cabinets, already owned by the customer or to be separately ordered from us. The integrated system bus takes care of interconnecting and addressing the individual modules. Additional interfaces facilitate data exchange with all established networks.

#### **Principle of Function**

The virtual heart of the Master Clock System is the time base module, marked 1 in the schematic, from which all control of the Master Clock System emanates. To safeguard the security of operation, as a rule two time base modules (system redundancy) are used. In case of a power disruption, programmed configurations will be retained in a flash memory. The system is synchronised by the radio receiver module 2, connected to a choice of DCF77 or GPS remote antenna

Operation of slave clocks is facilitated by a separate line module 6 for every clock line, with a variety of choices of pulse patterns and line monitoring capabilities. An additional monitoring device 5, measuring and indicating grounding resistance, line voltage and current on each line, is optional. Incoming error messages may be relayed through the earth-free contact 11 or monitored on a locally provided operator PC 10.

For actuation of optical or acoustic signals (to indicate start/end of work and/or break periods) up to 8 switching modules 3 may be integrated, with 8 earth-free contacts each.

Power is supplied to the Master Clock System by an internal mains adapter

7. A rechargeable battery 8 provides power in case of a mains disruption (emergency power). Alternatively, power may be provided from an external source 9.

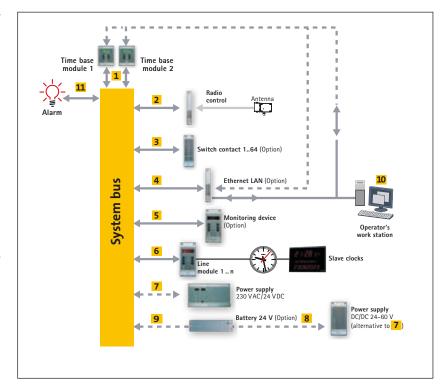


Programming and control of the Master Clock System are effected either at the time base module or directly at the individual modules.

Software and interface hardware for control from a locally installed PC 10, connected by LAN 4, are available as options.

Existing IT systems may be integrated either by LAN 4

The Master Clock System will be completely wired and mounted in a wall-mounted or free-standing cabinet at our factory. Modules will be arranged to customer's specification.



Make your choice of desired component groups and modules on this and the following pages or call us – we will be pleased to offer you an equipment set that meets your specific demands!





### Free-Standing Cabinet 38 HU

Free-standing cabinet 38 HU interior height, with provisions for mounting of 19", 3 HU racks. Feet adjustable for height, lockable clear front door. All wiring connections accessible through rear wall,

secured by a lockable metal door. Side panels are detachable with inside locks. Dimensions (WxHxD)cir. 600 x 1.800 x 650 mm. weight empty cir. 75 kg.

Туре	Capacity	Item No.	€ each
19" free-standing cabinet, 38 HU (without content)	36 HU, 84 WU	11 <b>.980</b> .138	5,990



Modular **Master Clock System** 



### Wall-Mounted Cabinet, 12 HU, 15 HU

Wall mounted cabinet for 19" racks (3 HU each), interior height 12 HU or 15 HU. Lockable clear front door. The mounting frame is hinged to swing out and make all wiring connections accessible from behind. Dimensions (WxHxD) 12 HU: cir. 600 x 612 x 515 mm, 15 HU: cir. 600 x 746 x 515 mm, weight empty cir. 16 kg and 18 kg resp.

Туре	Capacity	Item No.	€ each
19" wall-mounted cabinet, 12 HU (without content)	12 HU, 84 WU	11. <b>980</b> .112	2,890
19" wall-mounted cabinet, 15 HU (without content)	15 HU, 84 WU	11. <b>980</b> .115	3,090





























19" rack element (3 HU) for plug-in mounting of the required component groups. All individual modules are interconnected by the integrated system bus, each module's address being defined by its mounting position.

The external connections of the individual modules are located at their rear faces. Mounting different types of modules on the same rack element is permissible. Unoccupied spaces must be covered by blanking plates.

Туре	Capacity	Item No.	€ each
19" rack element, 3 HU, incl. system bus (without content)	3 HU, 84 WU	11. <b>980</b> .184	995
Blanking plate, 84 WU	3 HU, 84 WU	01. <b>980</b> .184	149
Blanking plate, 12 WU	3 HU, 12 WU	01. <b>980</b> .112	72
Blanking plate, 4 WU	3 HU, 4 WU	01. <b>980</b> .104	49



### Time Base Module

The microprocessor-controlled time base module is used to set the operating parameters for the entire Master Clock System, it takes central control and monitors all system functions. Once programmed, the configuration will be saved in a flash memory in case of power disruptions. Change between summer to winter time is automatic by radio control through DCF77 or GPS and the respective remote antennas and/or receivers. Programming is effected by six buttons on the front panel or - optionally - by a locally installed PC or by modem from a network. Data

interfaces and programming software for all established operating systems may be ordered as extras. Error warnings in case of malfunction or power disruption are signalled by the alarm output contact or the operator's PC. The two-line, 16 digit LCD display in the front plate indicates current (system) time and date and (multiple language) messages for operator guidance. LEDs indicate current status.

To enhance the security of operation, as a rule two time base modules (redundant system) are used in parallel.

Type	Dimensions	Item No.	€ each
Time base module	3 HE, 20 TE	11. <b>980</b> .211	2,390

Make your choice of desired component groups and modules on this and the following pages or call us - we will be pleased to offer you an equipment set that meets your specific demands!





Modular **Master Clock System** 



### Receiver Module with Antenna

Capable of synchronising one or more time base modules, the receiver modules come complete with appropriate (DCF77 or GPS) remotable antennas. Antennas may be mounted indoors or outdoors (GPS

outdoors only). LED indicator for quality of reception. Mounting device for antenna and 10 m connecting wire included (extension to several times this length possible, please call for information).

Туре	Dimensions	Item No.	€ each
Receiver module DCF77, incl. antenna (IP55)	3 HU, 4 WU	11.980.221	1,150
Receiver module GPS, incl. antenna (IP65)	3 HU, 4 WU	11. <b>980</b> .231	1,995



























### **Line Driver Module**

Controlled by the superimposed time base module, the line driver modules administer switched power to the slave clock lines connected to them. The line voltage is either 24 V or 60 V (48 V on request) the line/pulse current is 1 A per module max., protected by an electronic fuse. The pulse mode may be chosen as:

- minute pulse, polarity alternating
- half-minute pulse, polarity alternating
- second pulse, polarity alternating
- PEWETA DCFport24 telegram (24 V version only).

Module circuitry includes automatic recognition of too high and/or too low line

voltage with automatic safety cut-off, at the cut-off or alarm threshold of your choice. In case of a malfunction of the time base module, the line driver modules automatically without delay take over control of their slave clock lines. The line driver modules may be programmed either through the time base module or by six buttons on their front plates. The slave clock line may be visually monitored by means of a 6-digit software monitor slave clock, the LED display of which is also used for operator guidance during programming. LEDs on the front panel enable instantaneous status recognition..

Туре	Dimensions	Item No.	€ each
Line driver module, 1 A, line voltage 24 V	3 HU, 12 WU	11. <b>980</b> .324	1,050
Line driver module, 1 A, line voltage 60 V	3 HU, 12 WU	11. <b>980</b> .360	1,150



## **Monitoring Device**

For extra security of operation, the monitoring device monitors grounding resistance, line voltage and line current of the connected line modules. Voltage and current of each line may be visually checked

by means of the 6-digit digital LED display. If a line is grounded, an alarm will be triggered. LEDs on the front panel enable instantaneous status recognition.

Туре	Dimensions	Item No.	€ each
Monitoring device	3 HU, 12 WU	11. <b>980</b> .390	2,250



## **Switching Module**

The switching module offers 8 earth-free contacts for triggering optical and/or acoustic signals or alarms as well as on/off control of other systems (such as lighting or illumination). 4 of the 8 relay contact outputs are rigged for alternate function switching, the other four are for on/off switching only. On/off interval switching is programmable with intervals of 1... 59

seconds. A three-position switch with indicating LED per channel enables manual override of the automatic function to permanently on or off. Current capacity per contact is 6 A at 230 VAC. Up to 8 switching modules (8 x 8 = 64 channels or circuits) may be operated in one Master Clock System. LEDs on the front panel enable instantaneous status recognition.

Туре	Dimensions	Item No.	€ each
Switching module, 8 free-floating switch contacts	3 HU, 8 TU	11. <b>980</b> .481	1,295









## **Mains Power Supply Module**

Power for the entire Master Clock System is supplied by the mains power supply. Input voltage is 230 VAC +/- 10 %. Output voltage is 24 VDC (rated voltage). Three output current capabilities are available: 5 A, 10 A and 20 A sustained load. The power supply is protected against short

circuits and overloads. 2 LED digital displays indicate input and output voltage and current. Alarm threshold for low input voltage cut-off may be programmed. LEDs on the front panel enable instantaneous status recognition.

ers. Two battery capacities are available:

20 Ah or 65 Ah. Maintenance-free Dryfit

rechargeable batteries come complete

with 19" rack element.

Type	Dimensions	Item No.	€ each
Mains power supply module 230 VAC/24 VDC – 5 A	3 HU, 48 WU	11. <b>980</b> .605	1,790
Mains power supply module 230 VAC/24 VDC – 10 A	3 HU, 48 WU	11. <b>980</b> .610	2,390
Mains power supply module 230 VAC/24 VDC – 20 A	3 HU, 48 WU	11 <b>.980</b> .620	4,190



Modular **Master Clock System** 



## **Battery Module**

Lead-acid rechargeable batteries with immobilised electrolyte are used to supply power to the Master Clock System and the slave clock lines (duration determined by number of slave clocks connected). The batteries are protected against excessive

Dimensions Item No. € each 3 HU, 84 WU 11.**980**.720 Battery module 24 V/20 Ah 2,490.-6 HU, 84 WU 11.980.765 Battery module 24 V/65 Ah 4.790.-





















## DC/DC Converter Module

If power to the Master Clock System is supplied from an external DC source, the 8 VDC converter module is needed to supply the individual modules. Input and output voltages are completely insulated against each other. Input is protected

against wrong polarity and momentary power loss. Outputs are short-circuitproof. The number of converter modules required is determined by the number of modules to be supplied.

Туре	Dimensions	Item No.	€ each
DC/DC converter module 24 V/8 V/2 A	3 HU, 12 WU	11. <b>980</b> .824	890
DC/DC converter module 60 V/8 V/2 A	3 HU, 12 WU	11. <b>980</b> .860	890



### **Data Interface Module, Software**

The Master Clock System may be expanded by an Ethernet interface to match the Master Clock System up with an Ethernet Local Area Network (LAN).

Thus, other peripheral equipment connected to the LAN will receive accurate time through the NTP protocol.

The following software for operating the Master Clock System is available:

- Operator software for programming various time bases
- Signalling software for the programming of switching module outputs.

Туре	Dimensions	Item No.	€ each
Ethernet data interface module	3 HU, 4 WU	04. <b>980</b> .915	2,095
Operator software		05. <b>980</b> .932	1,290
Signalling software		05. <b>980</b> .933	1,450

Make your choice of desired component groups and modules on this and the following pages or call us - we will be pleased to offer you an equipment set that meets your specific demands!



# **Transmission Pattern of "Legal" Time** by the DCF77 low frequency radio transmitter



**Transmission** pattern of "legal" time

**Duration of** summer time



The DCF77 time signal transmitted from Mainflingen near Frankfurt/ Main is derived from nuclear decay timing devices operated and controlled by the Federal Establishment for Physics and Technology (PTB) at Braunschweig. Range of this radio signal is approximately 1,500 km. Beyond this range we recommend radio control by GPS (Global Positioning System).

#### **Duration of Summer Time\***

Beginning and End of summer time have been set for the following days -01,00 world time:

	Start	End
		Sunday, October 27th
2025	Sunday, March 30th	Sunday, October 26th
2026	Sunday, March 29th	Sunday, October 25th

\*for European Union countries





## The General Terms and Conditions of Sale

## of PEWETA KG (GmbH+Co.), Hamburg

#### 1. General

The following terms and conditions alone shall apply to all contracts for sale and contracts for work and materials concluded with us and to any offers made by us, if and to the extent that nothing to the contrary is agreed in writing. The general terms and conditions of the purchaser shall not apply, even if we do not expressly repudiate them.

## 2. Offers, product documentation and the acceptance of orders

Until such time as an order is confirmed in writing, any offers made by us shall remain non-binding on us. Only our written confirmation of the order shall stipulate the scope of the delivery or performance to be given. Any technical specifications and descriptions which are set out in offers or brochures or any other printed material and on the internet shall only be binding if they are designated as binding in the confirmation of the order.

We reserve the right to make any changes as the result of technical progress, as well as any optical changes, to the extent that such changes are not detrimental to the client and are reasonable.

Orders submitted by the purchaser shall only be deemed to have been accepted when they have been confirmed by us in writing, either by fax or by e-mail, by dispatch of the goods or by the issue of an invoice. Cancellations of and changes to orders shall only be valid after our written confirmation thereof has been received.

#### 3. Prices and conditions of payment

To the extent that nothing is expressly agreed to the contrary, our ex works prices (EXW Incoterms 2020) from Hamburg shall apply, plus a fixed sum in respect of packaging and transport and value-added tax at the statutory rate. No shipping insurance cover is included in our prices. The purchaser may only set off any counter-claims which it may have if such counter-claims are not disputed or if they have the force of res judicata. The same shall apply to the enforcement of any rights of retention.

### 4. Delivery periods and delivery conditions

Delivery periods shall be deemed to have been complied with if, by the date of the expiry of such delivery periods, the subject-matter of the delivery has been readied for dispatch ex works, or, should the dispatch of the goods be delayed for reasons which are attributable to the purchaser, if the goods' readiness for dispatch has been notified within the agreed delivery period.

Partial deliveries in accordance with an agreed delivery schedule and agreed volumes shall be permitted and may be invoiced separately.

Sale and delivery of the goods shall be subject to correct and punctual supply to

## 5. Transfer of risk, damage during shipping and theft

Risk shall be transferred to the purchaser when the goods leave our warehouse or, if the purchaser has to pick up the goods himself and the due date has passed, whenever the goods' readiness for dispatch has been notified to the purchaser. The goods shall therefore in all circum-

stances be shipped at the risk of the purchaser. We shall not be liable for theft or for any damage which occurs during shipment.

#### 6. The return of goods

Any return of goods which is not based on our statutory obligations shall be subject to our prior written consent and shall be in accordance with the following provisions: custom-made goods and goods which are not stocked by us as a matter of course may not be returned. Goods shall be taken back at their net invoice price excluding any ancillary costs (e.g. packaging or transport costs) minus a fee of 20% in respect of the inspection and processing of the goods which are taken back and any other costs associated with such return, subject to the condition that the goods are sent back to us shipping paid, in their original packaging and with their original value. The approval of any returned goods shall be a matter for us alone. Should any costs be incurred in connection with returning the goods to their original condition, the purchaser shall bear such costs.

#### 7. Liability for defects

Any claims pursuant to visible defects shall only be permissible if they are notified to us in writing immediately and at the latest within a period of eight calendar days from the date on which the goods are received. Hidden defects must also be notified to us immediately and at the latest within a period of eight calendar days from the date of their discovery. In the event of a substantiated claim which is notified within the periods set out above, we may at our discretion and within a reasonable period repair the goods or deliver replacements free of charge. Apart from that the provisions of the law shall apply.

Claims in respect of defects in accordance with section 437 of the *Bürgerliches Gesetzbuch* [German Civil Code] shall be time-barred twelve months from the date of delivery. This provision shall not apply to claims for damages and in respect of the reimbursement of any expenses incurred. The statutory periods shall apply to such claims.

#### 8. General liability

Claims for compensation of any nature which may be brought against us and our legal representatives and agents shall be excluded, in the absence of any intent or gross negligence or the breach of a material contractual obligation on our part.

In accordance with this provision, the breach of a material contractual obligation shall mean any obligation of which the observance makes the proper execution of the contract possible and on the observance of which the purchaser therefore may duly rely.

Liability for the gross negligence of our employees, to the extent that such employees are not management personnel, shall however be limited to compensation for typically foreseable damage. This limitation of liability shall not apply to any breach of a material contractual obligation within the meaning of the previous paragraph.

The limitations and exclusions of liability set out above shall not apply to any liability pursuant to the *Produkthaftungsgesetz* [German Law on Product Liability] or to any domestic laws which implement the Product Liability Regulation or in the event of the death of, or physical injury to a person, or prejudice done to the health of a person.

#### 9. Retention of title

We shall retain title to the delivered goods until payment is made to us in full of all outstanding amounts due pursuant to the commercial relationship.

It shall only be permissible to sell on the delivered goods in the normal course of business  $% \left\{ \left( 1\right) \right\} =\left\{ \left( 1$ subject to a retention of title, and only if the right to receive payment pursuant to the onsale is assigned to us. The purchaser shall be prohibited from pledging the goods or transferring them by way of security and shall also be prohibited from concluding any agreement in relation to an assignment. The purchaser must inform us immediately of any pledge or any other impairment of our rights by third parties. The purchaser hereby assigns to us in advance any rights which may accrue to it pursuant to the on-sale of our goods. We hereby accept such assignment. Should the value of the security given to us exceed the sums due to us by more than 10%, we undertake at our discretion and at the request of the purchaser to release the corresponding security.

## 10.Place of performance, place of jurisdiction and applicable law

The exclusive place of performance shall be Hamburg. The exclusive place of jurisdiction for all disputes with commercial parties or with persons who are not generally subject to the jurisdiction of a domestic German Court shall be Hamburg. At our discretion we may instigate proceedings against the purchaser before the Court which has jurisdiction over the location of its registered office or before the Arbitral Tribunal of the German Institution for Arbitration (DIS). In the event of arbitration proceedings, the location of the arbitration shall be Hamburg.

German law shall apply. The United Nations Convention on Contracts for the International Sale of Goods shall not apply. The Incoterms 2020 shall apply, as amended.



The general terms and conditions of sale

Prices, freight and handling

#### Prices

All prices indicated in EURO (€), based on delivery ex works Hamburg (EXW, according to INCOTERMS 2020) and are on a recommendation basis without obligation only. Cost for packing, freight and insurance to be added to prices. Taxes and duties to be paid by buyer.

#### Changes

All details on scope of delivery, state-of-theart, measurements and weight conform to our knowledge at the time of publishing. Prices and specifications are subject to change without notice. All rights reserved.

This catalogue is effective from January 1st, 2024 on.

All previous prices become ineffective at that date.

#### Packing, Freight, Insurance

Cost for packing, freight and insurance to be agreed.

#### Notice

This catalogue is merely the translation of the original German edition. Technical prerequisites, e.g. receiving conditions for radio controlled systems, electrical voltages etc. have to be determined locally and must be made available to us in written form by customer before the order is placed. Feasibility can be confirmed in written form by us only. Otherwise we will supply as stated in this catalogue



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