

# Hour and minute hand clock

## Analogue clock

## Profil 960

### Description :

- Indoor or outdoor illuminated and weatherproof clock with analogue display.
- Hour - minute or hour - minute - second display, depending on the model.
- ABS white casing.
- Optimal viewing distance : 60 metres.
- Safety glass lens.
- Dial models: Arabic figures or minute notches.
- Models: DHF, quartz, 24V second, 24V minute, AFNOR, radio synchronised FI, NTP Supervised.
- Illumination: low power consumption LED.
- As options: anti-vandalism polycarbonate crystal.



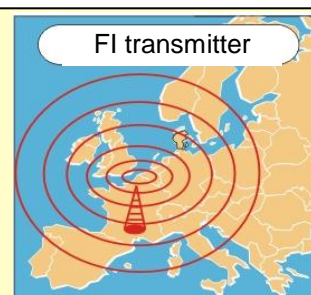
### Technical features:

	Movement	Power supply	Operating temperature	IP	IK	Display	Weight	Dwg
Profil 960I SF	Quartz with remote keyboard	230 V** 50Hz ±10%	-25°C to +70°C	40	08	HM	7,7 kg	1
	24V minute		-25°C to +70°C	40	08	HM	7,7 kg	1
	24V ½ minute		- 25°C to +70°C	40	08	HM	7,7 kg	1
	serial ½ minute		- 25°C to +70°C	40	08	HM	7,7 kg	1
	AFNOR	6 to 24V AC or DC	-25°C to +70°C	40	08	HM	8,1 kg	1
	NTP	PoE	-25°C to +70°C	40	08	HM	7,5 kg	1
	DHF	2x1,5V LR14 batteries	- 5°C to +50°C	40	08	HM	7,5 kg	1
	DHF TBT	230 V** 50Hz ±10%	- 5°C to +50°C	40	08	HM	7,5 kg	1
Profil 960E SF	Quartz with remote keyboard Led	230 V** 50Hz ±10%	- 25°C to +70°C	53	08	HM	16,5 kg	2
	24V minute Led	230 V** 50Hz ±10% *	-25°C to +70°C	53	08	HM/HMS	16,5 kg	2
	serial ½ minute	230 V** 50Hz ±10%	- 25°C to +70°C	53	08	HM/HMS	15,2 kg	2
	AFNOR + radio FI Led	230 V** 50Hz ±10%	-25°C to +70°C	53	08	HM/HMS	17,2 kg	2
	NTP	PoE or 230 V** 50Hz ±10%	-25°C to +70°C	53	08	HM/HMS	14,7 kg	2
Profil 960E DF	Quartz with remote keyboard Led	230 V** 50Hz ±10%	- 25°C to +70°C	43	08	HM	29,4 kg	3
	24V minute Led	230 V** 50Hz ±10% *	- 25°C to +70°C	43	08	HM/HMS	29,4 kg	3
	serial ½ minute	230 V** 50Hz ±10%	- 25°C to +70°C	43	08	HM/HMS	25 kg	3
	AFNOR + radio FI Led	230 V** 50Hz ±10%	-25°C to +70°C	43	08	HM/HMS	30 kg	3
	NTP	PoE or 230 V** 50Hz ±10%	-25°C to +70°C	43	08	HM/HMS	25 kg	3

SF= single sided, DF= double sided, I=Indoor, E=Outdoor, HM = hour-minute, HMS= hour-minute-second.

Drawing: other side of the page.

\* for clocks with synchronous second hand. \*\* 230V AC power supply only via a time setting control box (réf : 933006).



**Swivel arm system for outdoor Profil 960E Single Sided**



**LED-illumination detail**

Consumption	SF	DF
LED lighting	20W	28W

### Profil 960 references

	960 Indoor SF	960E SF led	960E DF led
► ½ minute 24V	933 11*1		
► Quartz with remote keyboard	933 211	934 26**1	934 26**6
► 24V Minute	933 511	934 561	934 566
► ½ minute série	933 611		
► AFNOR HM + radio FI		934 961	934 966
► AFNOR HMS + radio FI		934 061	934 066
► AFNOR TBT	933 811		
► DHF pile	933 B11		
► DHF 230 VAC	933 C11		
► NTP PoE Multicast	933 D11		
► NTP 230V HM		934 M61	934M66
► NTP 230V HMS		934 N61	934N66

\* The next to last figure of the reference corresponds to the dial type: 1= figure, 2= notch, 3=DIN.

Example : 933111= figure dial, 933121=notch dial.

Option: anti-vandalism polycarbonate crystal for Profil 960, add "P" to the reference number.



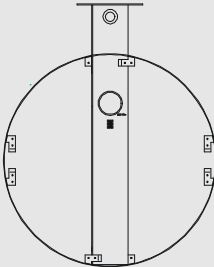
Réf. 643211 P

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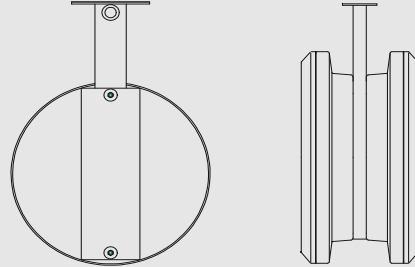
**Profil 960**

Double sided bracket for clock corresponding to drawing 1



A double sided clocks consist of 2 single sided clocks + a double sided bracket.

Double sided bracket for clock corresponding to drawing 2



### Movements and synchronisation:

#### Quartz movement with remote keyboard

- The clock is totally independent. The time information comes from its own time basis.

#### DHF (norm NF S 87-500C)

- The DHF clocks pick up the radio signal and get automatically synchronised. If radio reception is poor, they keep on working on their own time basis.

#### Radio FI

- The clock is totally independent. The France Inter radio synchronized movement brings absolute accuracy and automatic summer/winter changeovers.

#### AFNOR + radio FI

- The coded time distribution consists in transmitting a complete time message each second: the setting on time of the receivers is realised automatically and speedily as soon as they are connected on the clock line.
- The AFNOR coded time does not transmit interference and is insensitive to other electrical interference.
- The radio synchronisation permits to display the time with perfect accuracy and to make automatically summer/winter time changeover.

#### 24V minute impulse

- The receiver clocks are connected to a distribution line and activated by means of electrical impulses transmitted every minute by the master clock.

#### 1/2 minute serial impulse slave movement

- Slave clocks are connected to a distribution line and activated through electrical impulses sent every ½ minute by the master clock.

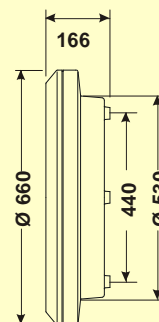
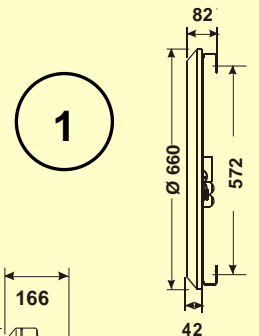
#### NTP

- The slave clocks connect to the Ethernet network from which they get their PoE power supply (consumption: 25 mA at 48 V DC). The time synchronisation is accomplished by the server or the master clock using the NTP protocol : NTP Supervised : unicast, multicast and by DHCP.

### Norms (depending on the models):

- NF EN50081-1: generic emission standard.
- NF EN50082-1 and 50082-2: generic immunity standard.
- NF EN55022 class B: limit and methods of measurement of radio disturbance characteristics of information technology equipment.
- NF EN60950: Safety of information technology equipment.
- NF EN300-220-3: radio equipment standard.
- NF EN301-489-3: EMC standard for radio equipment
- NF S 87-500 C.

### Dimensions in mm



### Mounting Accessories:

- |   |         |
|---|---------|
| ► Double sided bracket corresponding to drawing 2 | 933 001 |
| ► Double sided bracket corresponding to drawing 1 | 933 003 |
| ► Back ring for Profil 960i                       | 933 004 |
| ► Back casing + hinged arm system for Profil 960i | 933 005 |
| ► Remote keyboard                                 | 933 006 |
| ► BT radio FI 230V                                | 933 010 |
| ► BT radio DCF 230V                               | 933 011 |

