

# Technical features

## Analogue clocks

## Profil 930

### Description :

- ▶ Clock with analogue display.
- ▶ Hour - minute or hour - minute and second display.
- ▶ All DHF, AFNOR, NTP or radiosynchronized clocks include hand position control and automatic time set up.
- ▶ ABS casing IP 40, IK 1.
- ▶ Readability: 20m
- ▶ Protective glass made with poly methacrylate.
- ▶ Casing colours: black, white, aluminium or chromium.
- ▶ Dial models : Arabic figures or minute notches.
- ▶ Wall bracket with optional locking system.



### Technical features :

Movement	Power supply	Operating temperature	Weight
Quartz	1,5V LR6 battery	- 0°C to +50°C	0,7kg
DCF Radio	1,5V LR6 battery	- 5°C to +55°C	0,7kg
MSF Radio	1,5V LR6 battery	- 5°C to +55°C	0,7kg
½ minute series rec.		-10°C to +50°C	0,9kg
24 V minute rec.		-10°C to +50°C	0,9kg
24V ½ minute rec.		-10°C to +50°C	0,9kg
24 V second rec.		-10°C to +50°C	0,7kg
France Inter Radio	2x1,5V LR6 batteries	- 5°C to +50°C	0,7kg
Radio DHF rec.	2x1,5V LR6 batteries	- 5°C to +50°C	0,7kg
Radio DHF TBT rec.	6 to 16V DC	- 5°C to +50°C	0,7kg
NTP receiver PoE	Powered through the Ethernet network	-5°C to +50°C	0,7kg
AFNOR TBT rec.	6 to 24V DC	-5°C to +50°C	0,7kg

### Norms :

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



### Casing colours



### Optional chromium plated casing.



### Double sided profil 930

### References

- ▶ Independent quartz on battery
- ▶ Radio synchronised DCF
- ▶ Radio synchronised MSF
- ▶ 24V second receiver
- ▶ 24V minute receiver
- ▶ 1/2 minute serial receiver
- ▶ 24V ½ minute receiver
- ▶ France Inter radio synchronized
- ▶ DHF battery slave clock
- ▶ DHF TBT slave clock
- ▶ NTP PoE slave clock
- ▶ AFNOR TBT slave clock

### HM

981 511  
981 611  
981 711  
982 211  
982 411  
982 611  
982 811

### HMS

981 11\*\*\*  
981 311  
981 A11  
981 511  
982 111  
982 311  
982 511  
982 711  
982 911

\* Last figure of the reference number represents the casing colour:  
1 = white, 2 = black, 3 = chromium, 5 = aluminium.  
\*\*Previous figure is the type of dial:  
1 = figures, 2 = notches, 3 = Din.



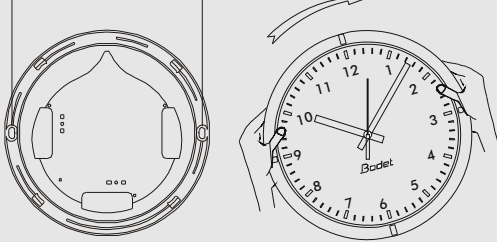
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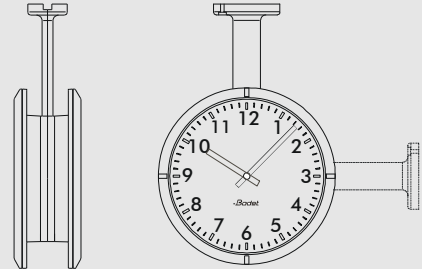
Single sided wall support

Mounting screws



When the support is fixed on the wall, turn the clock a quarter turn in the clockwise so that the clock is in the correct position.

Double sided bracket mounting



### **Movements and synchronisation:**

#### Battery quartz autonomous movement with second hand

► The clock is totally independent, the time information comes from its own time basis.

#### FI, DCF or MSF radio synchronized autonomous movement

► The clock is totally independent. The France Inter, DCF or MSF radio synchronized movement brings absolute accuracy and automatic summer/winter changeovers.

#### IRIG-B/AFNOR coded time receiver

► The coded time distribution consists in transmitting a complete time message each second : the setting on time of the receivers is realised automatically and immediately after connection to the clock line.

► The IRIG-B/AFNOR coded time does not transmit interference and is insensitive to other electrical interference.

#### DHF receiver (norm AFNOR NF S 87-500)

► 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.

#### 24V minute impulse slave movement

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

#### 24V second impulse slave movement

► Slave clocks are connected to a distribution line and activated through electrical impulses sent every second 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.

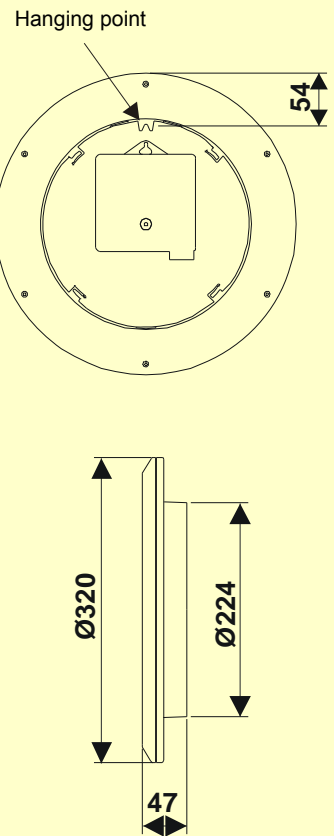
#### 1.5V serial impulse slave movement (for BT radio)

► The slave clocks are connected to a radio synchronization box (BT radio) that generates electrical impulses every minute.

#### Network Time Protocol (NTP) slave movement

► The slave clocks are connected to the network Ethernet through IP addressing. The time synchronization is distributed from primary servers towards the network.

### **Dimensions in mm**



### **Mounting Accessories:**

- |   |         |
|---|---------|
| ► Double sided bracket                                | 981 001 |
| ► Short double sided bracket                          | 981 002 |
| ► Secure wall fixing bracket for single sided clock   | 981 006 |
| ► Power supply unit for battery-operated clock        | 981 011 |
| ► 230V power supply with screw terminal for TBT clock | 938 914 |
| ► 230V power supply with mains plug for TBT clock     | 938 916 |

