

# Technical features

## DHF time distribution

## Nanotime

The Nanotime time base sends DHF signal in local time. This product includes 67 time zones with integrated daylight saving time.

The DHF consists in transmitting wirelessly a complete time message including Hour Minute Second Day Month and Year to clocks. The 869 MHz radio waves can be received through building walls. The range is about 100 to 200 m depending on number, structure and thickness of the walls.

The Nanotime time base is synchronised by a GPS, FI or DCF antenna (included) ensuring high accuracy.



### General features :

- ▶ Synchronisation : GPS, FI or DCF.
- ▶ Time output : DHF 869.525MHz (NFS 87500-C).
- ▶ Power supply : 240V 50-60Hz for FI and DCF versions,  
100-240V 50-60Hz for GPS version.
- ▶ Accuracy: 0.2 s/day.
- ▶ Dimensions : 150 x 110 x 90 mm.
- ▶ Operating temperature : -20°C to + 50°C.
- ▶ Consumption : 9.2 W.
- ▶ Weight : 0.6 Kg.
- ▶ Protection rating : IP 55, IK 08.

### Operating :

Once obtained the first synchronisation, then the DHF output is permanently active. In case of loss of synchronisation, the DHF output remains active. If after 24 hours, there were no new synchronisation, the synchronisation LED is then put in search mode. After a power failure, it is necessary to have a new synchronisation for the product to function properly. The local time is set using the "TIME ZONE" DIP switches.

A set of LEDs is used to verify the proper functioning of the product:

- Green LED indicating power supply,
- Red LED to check the status of the synchronisation,
- Red LED to check the status of the DHF transmission,
- Yellow LED indicating the operation mode of the DHF output.

The INIT button is used to set the operation mode of the DHF output: INIT or NORMAL.

2 DIP switches are used to set three levels of power: 25mW, 125mW or 500mW.

A 10-position rotary DIP switch is used to set the DHF address (1 to 9). In position 0, there is no DHF transmission.

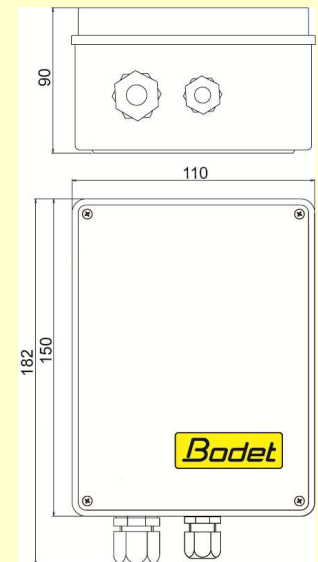
8 «TIME ZONE» DIP switches are used to set the "time zone" to be transmitted. Nanotime automatically handles the daylight saving time.

2 DIP switches are used to handle time change manually:

- 1 DIP switch is used to activate manual time change,
- 1 DIP switch is used to set Winter or Summer time if manual time change is activated.

### Applicable standards :

- Low Voltage directive 2006/95/CE :  
EN60950.
- EMC directive 2004/108/CE :  
EN55022  
EN55024.
- R&TTE directive 1999/5/CE :  
EN301-489-3  
EN300-220-2



### Reference:

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|-----------------------------|--------|
| ▶ NANOTIME FI>DHF 240V      | 927271 |
| ▶ NANOTIME DCF>DHF 240V     | 927272 |
| ▶ NANOTIME GPS>DHF 100-240V | 927273 |

