

# Digital clock «Cristalys Ellipse»

#### For Indoor









# Description

- Indoor clock with liquid crystal display (LCD)
- Hour and multilingual date display, with temperature
- Extra flat casing
- Optimal viewing distance 25 metres, angle of vision 160°
- Integrated temperature sensor
- Casing colour: Silver, white
- Versions: radio synchronised DCF, DHF receiver, impulse slave movement, IRIG B/AFNOR coded time receiver or NTP receiver

### **Standards**

- NF EN 50081-1
- NF EN 50082-1
- NF EN 60950



| General features              |  |
|-------------------------------|--|
| Eco function                  | Providing energy savings through switching off display between 23:00 and 06:00   |
| Operation                     | Silent   |
| Display mode                  | 12 or 24 h   |
| Temperature display           | -25°C to +70°C or -13°F to +158°F. Selection °C or °F in the menu. Display resolution: 1°C.  |
|                               | Accuracy: ±0.5°C. Offset adjustment, possible from -9.5°C to +9.5°C in 0.5° steps  |
| Display                       | Multifunctional  |
| Display of language           | A choice of 12 languages   |
| Time change                   | Pre-programmed automatic summer/winter time changeover and perpetual calendar with   |
|                               | multi time zones   |
| Data saving                   | Permanent  |
| Accuracy of the               |  |
| ime quartz base               | 0.2 second/day (adjustable)  |
| Absolute time accuracy        | With optional radio synchronisation  |
| 2 Buttons                     | Programming and time setting   |
| ITP Synchronisation           | Unicast, multicast and by DHCP   |
| Mechanical features           |  |
| Construction                  | ABS casing, IP40, IK02   |
| Window                        | Glass  |
| Operating temp. range         | 0°C to +50°C   |
| Humidity                      | 80 % at 40°C   |
| Veight                        | 1.2 kg   |
| Electrical features           |  |
| Power supply                  | - Models AFNOR coded time receiver, wireless DHF, independent/24 V minute  |
| . erre. eapp.y                | impulse receiver: ELV 24 VDC or 2 piles type LR14  |
|                               | - Model NTP: PoE (Power Over Ethernet)   |
| Consumption                   | - Models AFNOR, DHF, DCF: 0.2 mA (Class III)   |
|                               | - Model AFNOR very low voltage: 10 mA (Class III)  |
|                               | - Model NTP: 2.5 W (Class III PoE)   |
| Ordering information          |  |
| 938 323                       | Radio synchronised DCF   |
| 938 331                       | Slave movement on impulses or AFNOR receiver – Battery   |
| 938 332                       | Slave movement on impulses or AFNOR receiver – TBT (6–24 VDC); power supply as option  |
| 38 341                        | DHF radio receiver   |
| 38 343                        | DHF radio receiver (very low voltage)  |
| 38 373                        | NTP PoE receiver   |
| accessories:                  |  |
| 202 271                       | Wall support (supplied with each Cristalys clock)  |
| 38 902                        | Table support  |
| 938 901                       | Double sided bracket for wall or ceiling mounting  |
| 938 905                       | Double sided bracket for wall or ceiling mounting (special length)   |
| 938 908                       | Single or double sided bracket specific length for wall or ceiling mounting (Specify the the   |
| 200 007                       | fixing mode (wall or ceiling) and the length between the top of the clock and the fixing point)  |
|                               | Support for very low voltage power supply  |
|                               | Final and district (Approximately and Approximately (Approximately |
| 938 907<br>938 914<br>938 916 | Embedded TBT (very low voltage) power supply (Capacity: 20 clocks)  Wall plug-in TBT power supply (capacity: 20 clocks)  |



#### Multifunctional clock

Possibility for fixed or alternate display on the bottom display line:

- Multilingual date
- Numerical date
- Indoor ambient temperature
- Day number (Julian) and week number
- Second counter
- Site or city or company name or message (up to 7 characters)

# Movements and synchronisation

#### Quartz movement

The clock is totally independent, the time information comes from its own time basis. Automatic summer/winter time changeover.

#### **DHF** movement

The clock is radio-synchronised by a DHF transmitter. Automatic summer/winter time changeover.

#### DCF radio synchronised movement

The clock is independent, the time information is provided by its own time basis which is corrected, in case of drift, by comparison to the DCF transmitter signal. The radio synchronisation permit to display the time with perfect accuracy. Automatic summer/winter time changeover.

#### IRIG B/AFNOR coded time receiver

The coded time distribution consist in transmitting a complete time message each second: the setting on time of the receivers is realised automatically and quickly as soon as they are connected to the time distribution line. The IRIG B/AFNOR coded time does not transmit interference and is insensitive to other electrical interference.

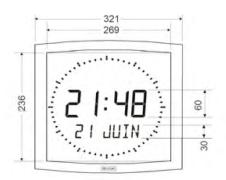
# 24 V minute impulses receiver movement

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

#### NTP PoE receiver

The slave clocks are connected to the network Ethernet through IP addressing. The time synchronization is distributed from primary servers towards the network or master clock with unicast, multicast or by DHCP models. The NTP server must have a transmission (Poll) period of less than 128 seconds.

## Dimensions (in mm)







Double-sided bracket