

## DESCRIPTION

- Indoor clock with liquid crystal display (LCD).
- Hour and multilingual date display, with temperature, day countdown.
- Extra flat casing.
- Optimal viewing distance 30 metres, angle of vision 160°.
- Integrated temperature probe.
- 2 casing colours: aluminium, white.
- Versions: independent quartz, radio synchronised DCF, DHF receiver, impulse slave movement, IRIG B/AFNOR coded time receiver or NTP receiver.



## STANDARDS

- NF EN50081-1 : generic emission standard.
- NF EN50082-1 : generic immunity standard.
- NF EN60950 : safety of information technology equipment.

## GENERAL FEATURES

- **Eco function**..... Providing energy savings through switching off display between 23.00 and 6.00.
- **Operation**..... Silent.
- **Display mode**..... 12 or 24 h.
- **Temperature display**..... -25°C to +70°C or -13°F to +158°F.
- **Display**..... Selection °C or °F in the menu. Display resolution: 1°C. Accuracy: ±0.5°C. Offset adjustment, possible from -9.5° to +9.5° in 0.5° steps.
- **Display**..... Multifunctional.
- **Display of language**..... A choice of 18 languages.
- **Time change**..... Pre-programmed automatic summer/winter time changeover and perpetual calendar with multi-time zones.
- **Data saving**..... 7 days.
- **Accuracy of the time quartz base**..... 0.2 second/day.
- **Absolute time accuracy**..... With optional radio synchronisation.
- **2 buttons**..... Programming and time setting.
- **Indicator**..... Low battery.
- **NTP Synchronisation**..... unicast, multicast and by DHCP.

## MECHANICAL FEATURES

- **Construction**..... ABS casing, IP40, IK02.
- **Window**..... Glass.
- **Operating temperature**..... 0 to 50°C.
- **Humidity**..... 80% at 40°C.
- **Poids** ..... 1.2 Kg.

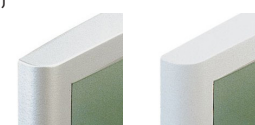
## ELECTRICAL FEATURES

- **Power supply**..... - Models AFNOR receiver, DHF, 24V minute impulse receiver : ELV (TBT) 24VDC or 4 batteries type LR14.  
- Model NTP: PoE (Power Over Ethernet).
- **Consumption**..... Models AFNOR, DHF, DCF = 0.2mA (Class III)  
Model AFNOR very low voltage = 10mA (Class III)  
Model NTP = 2.5W (Class III PoE)

## REFERENCES

- **938 211A**..... Independent quartz
- **938 223**..... Radio synchronised DCF
- **938 231**..... Slave movement on impulses or IRIG B/AFNOR receive
- **938 232**..... Slave movement on impulses or IRIG B/AFNOR receiver (very low voltage)
- **938 241**..... DHF radio receiver
- **938 243**..... DHF radio receiver (very low voltage)
- **938 273**..... NTP PoE receiver

Add to the reference: A for aluminium casing colour, B for white.



2 casing colours: aluminium, white.



## MULTIFUNCTIONAL CLOCK

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

- Day of the week multilingual.
- Ambient temperature in Celsius or Fahrenheit (limited to 99°).
- Day number (Julian).
- Week number.
- Second counter.

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

- Multilingual date.
- Numerical date.
- Site or city name or a word (up to 7 characters).
- Day countdown.

## 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 comes from its own time basis which is rectified, in case of drift, by comparing it 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 speedily as soon as they are connected on the clock line.

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

### • 24V 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.

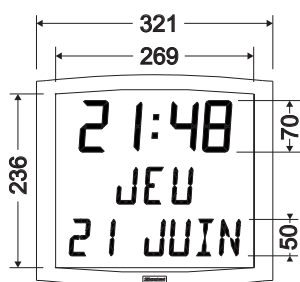
### • NTP PoE receiver

The slave clocks are connected to the network Ethernet through IP addressing. The time synchronisation is distributed from primary servers towards the network or master clock with unicast, multicast or by DHCP models.

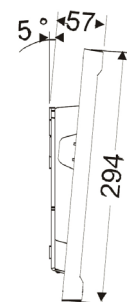
The NTP server must have a transmission (Poll) period of less than 128 seconds.



Cristalys Date  
on table support



Cristalys Date  
on double sided bracket



## ACCESSORIES

- 938 902..... Table support
- 938 901..... Double sided bracket for wall or ceiling mounting
- 938 905..... Double sided bracket for wall or ceiling mounting (long length)
- 938 908..... Single or double sided bracket specific length for wall or ceiling mounting (Please specify on the order the fixing mode (wall or ceiling) and the length between the top of the clock and the fixing point).
- 938 907..... Support for very low voltage power supply
- 938 914..... Embedded TBT (very low voltage) power supply (Capacity: 20 clocks)
- 938 916..... Wall plug-in TBT power supply (capacity: 20 clocks)