## CRISTALYS ELLIPSE

## DESCRIPTION

- Indoor clock with liquid crystal display (LCD).
- Hour and multilingual date display, with temperature.
- Extra flat casing.
- Optimal viewing distance 25 metres (Height of digits 6 cm ), angle of vision $160^{\circ}$.
- Integrated temperature probe.
- 3 casing colours: aluminium, white, burgundy.
- 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.


## GENERALES 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.. | $-25^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ or $-13^{\circ} \mathrm{F}$ to $+158^{\circ} \mathrm{F}$. |
| - Display... | Selection ${ }^{\circ} \mathrm{C}$ or ${ }^{\circ} \mathrm{F}$ in the menu. Display resolution: $1^{\circ} \mathrm{C}$. Accuracy: $\pm 0.5^{\circ} \mathrm{C}$. Offset adjustment, possible from $-9.5^{\circ}$ to $+9.5^{\circ}$ in $0.5^{\circ}$ 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 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 $50^{\circ} \mathrm{C}$. |
| - Humidity......................................... | $80 \%$ at $40^{\circ} \mathrm{C}$. |
| - Weight. | 1.2 Kg . |

## ELECTRICAL FEATURES

- Power supply.......................................... -
- Models AFNOR coded time receiver, wireless DHF, 24 V minute impulse receiver : ELV 24VDC or 2 piles type LR14.
- Model NTP : PoE (Power Over Ethernet).

Models AFNOR, DHF, DCF = 0.2mA (Class III)
Model AFNOR very low voltage $=10 \mathrm{~mA}$ (Class III)
Model NTP = 2.5W (Class III PoE)

## REFERENCES

- 938 311A
Independent quartz
- 938 323........................... Radio synchronised DCF
- 938 331........................... Slave movement on impulses or IRIG B/AFNOR receiver
- 938 332........................... Slave movement on impulses or IRIG B/AFNOR receiver (very low voltage
- 938 341........................... DHF radio receiver
- 938 343........................... DHF radio receiver (very low voltage)
- 938 373........................... NTP PoE receiver
Add to the reference: A for aluminium casing colour, B for white, D for burgundy.

burgundy,


## 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).


## MOUVEMENTS ET 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.
Changement d'heure été/hiver automatique.

## - 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.


Cristalys Ellipse on table support


## ACCESSORIES

| - 202271. | Wall support (supplied with each Cristalys clock) |
| :---: | :---: |
| - 938902. | Table support |
| - 938901 | Double sided bracket for wall or ceiling mounting |
| - 938905. | Double sided bracket for wall or ceiling mounting (long length) |
| - 938908. | 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). |
| - 938907. | Support for very low voltage power supply |
| - 938914. | Embedded TBT (very low voltage) power supply (Capacity: 20 clocks) |
| - 938916. | Wall plug-in TBT power supply (capacity: 20 clocks) |

