







#### Time setting

The professional LEDI® clocks can display the same time information, synchronized by a master clock or a time server. On standalone and pulse version, the time setting is manual. Display date and time alternately

#### Internal time base

The LEDI® clock has its own temperature compensated TCXO time base which allows an accuracy about 0.1 sec / day between 0° to 40°C in case of synchronization loss.

Backup of time information in case of mains absence, by lithium battery: 10

#### **Specifications**

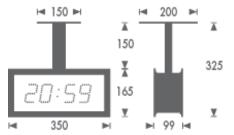
Power supply (following version)	230VAC 50/60Hz 115VAC 50/60Hz Low voltage 12, 24 or 48 VDC NTP Version: PoE (Power over Ethernet)
Certifications	CE, EN 62368, EN 55032, EN 55035, ROHS
Maximum consumption	16,51 VA
IP	30
MTBF	56 225 h
MTTR	Display: 5 min CPU: 5 min Power supply: 5 min
Weight	1.6 – 2.2kg
Dimension	350x165x99 mm (LxHxD) Bracket: 150 mm
Digit height	Hour/minute: 70 mm
Maximal distance of legibility	35 meters
Operating temperature	-20° to +50°C
Electrical equipment classification	<ul> <li>         ⊕ Class 1 (in 115 or 230 VAC)         ⊕ Class 3 (in 12, 24, 48 VDC or PoE)     </li> </ul>

#### Storage conditions

Conditions	Temperature	Hygrometry	Maximum cumulative duration
Extreme	-20°C to 10°C	10 to 85% HR	48h
Extreme	40°C to 70°C	10 to 85% HR	48h
Normal	10°C to 40°C	10 to 85% HR	6 months

The product must be switched on for 4 hours every 3 months to maintain its characteristics

<sup>\*</sup>see user guide for more information



## LEDI® REVERSO 7 Indoor / Double face

Professional LED clock, robust and stylish combining the best of the technology for an easy installation and operation.



#### **Key features**

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- Perfectly silent, direct and accurate reading of time.
- SMD bi-colour LED technology allows to change the display colour in red, green or yellow (optional white or blue)
- The patented technology of the light guide provides a perfect regularity of the brightness and viewing angle at 160  $^\circ$  The front face of the LEDI® is coated with an antiglare and anti-scratch
- film giving an extraordinary 60000 : 1 level of contrast.
- A protection against over-voltage and industrial interference via EMC filter
- An easy "plug and play" installation An anodized aluminium case
- Double face IP30 on bracket
- Its participation in the sustainable development life span over 20 years.
- 2 years warranty
- Up to 10 brightness levels for optimal viewing
- Remote and batch configuration via the optional "remote configuration" software
- Selection of colours (independently between wave and numbers) and brightness
- Behaviour of central dots (fixed, blinking...)

#### **NTP Version**

#### Advanced version (option K)

- Synchronisation of up to 4 NTPv4 servers and setting of advanced NTP options (poll rate / burst / preference order)
- Time zone selection and automatic summer/winter time change
- Supervision by SNMP v1, V2c, v3, SYSLOG, Consultation of event logs
- Configurations accessible via http and/or https
- Possibility of changing the display colour according to events (e.g. a loss of synchronisation changes the display colour to red)
- IPv4 / IPv6 protocoles
- 12h or 24h Mmode
- Stopwatch/timer: advanced options fully configurable and programmable (start time, end time, colour change...), control and configuration via web page, GTCHRONO or SNMP
- Sensor\*: Option to manage up to 3 different SNMP sensors (Temperature, Hygrometry, ...)
  \*Within the limits of the display

#### Standard Version (option N or W)

- Synchronisation of up to 3 NTP servers
- Time zone selection and automatic summer/winter time change
- Supervision by SNMP v1, v2.c
- Configurations accessible via http and/or https
- IPv4 / IPv6 protocoles
- Stopwatch/timer: simple option (triggering of a count sequence or countdown by button via web page or SNMP)
- Sensor: option to manage an SNMP Temperature or Humidity sensor

#### Display / LED characteristics

Single row LED display, SMD technology, reading angle: 160°

bi-colour (red, g	Monochrome LED	
• Red: 245 mcd		Blue: 625 mcd
Green: 780 mcd	•Yellow	○ White: 625 mcd

### Synchronisation inputs

- TCXO Quartz Standalone
- DCF77 (EUROPE) with antenna or DCF24V with pair cable
- Reverse parallel minute receiver 24V or 1/2 reverse minute series
- AFNOR NFS 87500 or IRIG B (to specify at purchase order)
- ASCILRS232 ASCILRS422/485
- Standard NTP (Option N) or advanced NTP (Option K) Ethernet 10/100BaseT
- Standard NTP Wi-Fi (IEEE 802.11 a/b/g/n standards 2.4 Ghz)
- **SMPTE**















# LEDI® REVERSO 7 Indoor / Double face

	ITEM CODE										
		ND000 /	$\overline{}$		_		1 F			л г	$\neg$
VERSION		ND360 /	<b>└</b>	1		<b>1</b>	l L	•		J L	•
Standalone: radio-synchronisable quartz time base 3.6864 MHz Holdover +/- 0.1 sec/24 h (between 0 and 40°C)			2								
DCF Radiosynchronisation. DCF Antenna + 4m cable	•		D				П			Ħ	
(1)DCF 24Vdc Synchronisation (Synchro in telecom pair cable)			Р							П	
GPS Radiosynchronisation. GPS Antenna + 10m cable			G							П	
6mA/24V reversed parallel minute pulses receiver clock			3								
Serial reversed 1/2 minute pulses receiver clock Consumption 1.25V. 60 to 120mA. 39 ohms shunt			5							Ц	
<sup>(2)</sup> AFNOR NFS 87500 Receiver			8							Ц	
SMPTE-EBU Receiver			7				Ш			Ш	
ASCII RS 232 Receiver			В				Ш			Н	
ASCII 422/485 Receiver	•		Q				Н			Н	
ADVANCED NTP Synchronisation (Ethernet RJ45 10/100)			K				Н			H	
STANDARD NTP Synchronisation (Ethernet RJ45 10/100) STANDARD NTP Synchronisation (Wi-Fi IEEE 802.11 a/b/g/n standard			W							Ħ	
2.4 Ghz) (1) Always combine this version with 230VAC 50/60Hz power supply only (2) If IRIG.B. version, please specify as a note on your order										П	
PROGRAMMABLE LED							Ш			Ш	
Selectable colour, red, yellow, green				1			Ħ			П	
Selectable colour white or blue				5						Ħ	
										П	
MOUNTING							Ц			Ц	
Please refer to the brackets technical sheet						P	Ц			Н	
COLOUR CASING										П	
Grey anodised aluminium					H						
Black anodised aluminium					П						
							_			П	
POWER SUPPLY										Ш	
Standard: 230VAC 50/60Hz									0		
115VAC 50/60Hz (Excluding version P)									1	Ш	
Power over Ethernet (PoE - IEEE802.3af) (version N or K)									7	Щ	
(3)Low voltage power supply: 12 VDC (Excluding versions K, N or W)									2	Ш	
(3)Low voltage power supply: 24 VDC (Excluding versions K, N or W)									4	$\Box$	
(3)Low voltage power supply: 48 VDC (Excluding versions K, N or W)									6	4	
OPTIONS											
(4)Timer function via web interface (versions K, N or W)											F
(3)Timer: touch housing control block (flush and wall mount version) + 4 meters of cable - up/down	•									T	1
(3) Timer: touch housing control block (flush and wall mount version) + 15 meters of cable - up/down	•										С
(3)Temperature probe(accuracy ± 0.5°C) + 5 m cable : temperature and hour displayed alternately	•									7	т
(5)IP Temperature sensor module (versions K, N or W)											G
(3)Timer output or stopwatch contact	•										E
(3)ASCII RS232 output (not to be combined with Ascii input version)										T	Α
or:	■										R
(3) ASCII RS422-485 output (not to be combined with Ascii input version)										4	
Tropicalization										$\perp$	U

<sup>(3)</sup> Option not available in NTP versions (Ethernet or Wi-Fi)



<sup>(4)</sup> CDG035 – GT Chrono compatible: Only for NTP Advanced Ethernet version (option K), management of the triggering of groups of clocks simultaneously and synchronised, by Windows software.

<sup>(5)</sup> Option for NTP versions (Ethernet or Wi-Fi) only, and compatible with a Temperature Sensor via IP station to be ordered separately, see module 92261