LEDI® 12 Waterproof

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

2 YEARS WARRANTY

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.

Security

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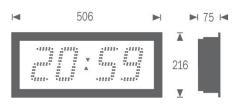
Specifications

Power supply (following version)	230VAC 50/60Hz 115VAC 50/60Hz Version NTP : PoE (Power over Ethernet)
Certifications	CE, EN 62368, EN 55032, EN 55035, ROHS, IEC 60950-22:2016 (2nd Edition)
Maximum consumption	13.78 VA
IP	65 front face / 54 rear face
MTBF	56 225 h
MTTR	Display: 5 min CPU: 5 min Power supply: 5 min
Weight	2.5 kg
Dimension	506x216x75 mm (LxHxD)
Digit height	Hour/minute: 110 mm
Maximal distance of legibility	Up tp 60 meters
Operating temperature	-20° to 60°C
Hygrometry	95% to 40°C
Electrical equipment classification	🖳 Class 1 (in 115 or 230 VAC) ◇ Class 3 (in PoE)

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*.
*see user guide for more information

Key features

- **Perfectly silent, direct and accurate** reading of time.
- **SMD bi-colour LED technology** allows to change the display colour in red, green or yellow
- **The patented technology of the light guide** provides a perfect regularity of the brightness and viewing angle at 160 °
- **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** wall mount or bracket
- **Securit glass 4mm** in front face
- **Tropicalized**
- **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, green) LED	
● Red: 245 mcd	●Yellow
● Green: 780 mcd	

Synchronisation inputs

- TCXO Quartz Standalone
- DCF77 (EUROPE) with antenna or DCF24V with pair cable
- GPS
- Reverse parallel minute receiver 24V or 1/2 reverse minute series
- AFNOR NFS 87500 or IRIG B (to specify at purchase order)
- ASCII RS232, ASCII RS422/485
- 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)

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	ITEM CODE							
	ND390E /	↑	↑	↑	↑	↑	↑	↑

FACE

Single face	1							
Double face	2							

VERSION

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						
[1]DCF 24Vdc Synchronisation *(Synchro in telecom pair cable)* ▣		P						
GPS Radiosynchronisation. GPS Antenna + 10m cable ▣		G						
6mA/24V reversed parallel minute pulses receiver clock ▣		3						
[2]AFNOR NFS 87500 Receiver ▣		8						
ASCII RS 232 Receiver ▣		B						
ASCII 422/485 Receiver ▣		Q						
ADVANCED NTP Synchronisation (**Ethernet** RJ45 10/100) ■		K						
STANDARD NTP Synchronisation (**Ethernet** RJ45 10/100) ▣		N						
STANDARD NTP Synchronisation (**Wi-Fi** IEEE 802.11 a/b/g/n standard 2.4 Ghz) ■		W						

(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

PROGRAMMABLE LED

Selectable colour, red, yellow, green ▣			4					

FRONT FACE

Securit glass 4mm – IP65 indoor or outdoor ▣				E				
Polymere (PMMA) – IP65 outdoor only ▣				M				

MOUNTING

(Single face) Standard: Wall mounting with bracket ▣					1			
(Single or double face) Please refer to the brackets technical sheet ▣					P			

COLOUR CASING

Grey anodised aluminium ▣						7		

POWER SUPPLY

Standard: 230VAC 50/60Hz ▣							0	
115VAC 50/60Hz *(Excluding version P)* ▣							1	
Power over Ethernet (PoE - IEEE802.3af) 1 cable Single face *(version N or K)* ▣							7	
Power over Ethernet (PoE - IEEE802.3af) 2 cables Double face *(version N or K)* ▣							8	

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 ▣								I
[3] Timer : touch housing control block (flush and wall mount version) + 15 meters of cable - up/down ▣								C
[3]Temperature probe(accuracy ± 0.5°C) + 5 m cable : temperature and hour displayed alternately ▣								T
[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)* ▣								A
or: [3]ASCII RS422-485 output *(not to be combined with Ascii input version)* ▣								R

(3) Option not available in NTP versions (Ethernet or Wi-Fi)
(4) 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.
(5) 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

All technical changes, aesthetic, colour can be made without prior notice.