

# LEDI® 7 Waterproof



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

*Recommended use under cover*



### 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

<b>Power supply (following version)</b>	230VAC 50/60Hz 115VAC 50/60Hz Version NTP : PoE (Power over Ethernet)
<b>Certifications</b>	CE, EN 62368, EN 55032, EN 55035, ROHS, IEC 60950-22:2016 (2nd Edition)
<b>Maximum consumption</b>	13.76 VA
<b>IP</b>	65 front face / 54 rear face
<b>MTBF</b>	56 225 h
<b>MTTR</b>	Display: 5 min CPU: 5 min Power supply: 5 min
<b>Weight</b>	1.6 kg
<b>Dimension</b>	356 x171x75 mm (LxHxD)
<b>Digit height</b>	Hour/minute: 70 mm
<b>Maximal distance of legibility</b>	35 meters
<b>Operating temperature</b>	-20° to 60°C
<b>Hygrometry</b>	95% to 40°C
<b>Electrical equipment classification</b>	⚡ 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 (optional white or blue)
- **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)

# LEDI® 7 Waterproof

ITEM CODE										
	ND360E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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) <input type="checkbox"/>	2									
DCF Radiosynchronisation. DCF Antenna + 4m cable <input type="checkbox"/>	D									
<sup>(1)</sup> DCF 24Vdc Synchronisation ( <i>Synchro in telecom pair cable</i> ) <input type="checkbox"/>	P									
GPS Radiosynchronisation. GPS Antenna + 10m cable <input type="checkbox"/>	G									
6mA/24V reversed parallel minute pulses receiver clock <input type="checkbox"/>	3									
<sup>(2)</sup> AFNOR NFS 87500 Receiver <input type="checkbox"/>	8									
ASCII RS 232 Receiver <input type="checkbox"/>	B									
ASCII 422/485 Receiver <input type="checkbox"/>	Q									
<b>ADVANCED NTP</b> Synchronisation ( <b>Ethernet</b> RJ45 10/100) <input checked="" type="checkbox"/>	K									
<b>STANDARD NTP</b> Synchronisation ( <b>Ethernet</b> RJ45 10/100) <input type="checkbox"/>	N									
<b>STANDARD NTP</b> Synchronisation ( <b>Wi-Fi</b> IEEE 802.11 a/b/g/n standard 2.4 Ghz) <input checked="" type="checkbox"/>	W									
<sup>(1)</sup> Always combine this version with 230VAC 50/60Hz power supply only										
<sup>(2)</sup> If IRIG.B. version, please specify as a note on your order										
PROGRAMMABLE LED										
Selectable colour, red, yellow, green <input type="checkbox"/>	4									
FRONT FACE										
Securit glass 4mm – IP65 indoor or outdoor <input type="checkbox"/>	E									
Polymere (PMMA) – IP65 outdoor only <input type="checkbox"/>	M									
MOUNTING										
<b>(Single face)</b> Standard: Wall mounting with bracket <input type="checkbox"/>	1									
<b>(Single or double face)</b> Please refer to the brackets technical sheet <input type="checkbox"/>	P									
COLOUR CASING										
Grey anodised aluminium <input type="checkbox"/>	7									
POWER SUPPLY										
Standard: 230VAC 50/60Hz <input type="checkbox"/>	0									
115VAC 50/60Hz ( <i>Excluding version P</i> ) <input type="checkbox"/>	1									
Power over Ethernet (PoE - IEEE802.3af) ( <i>version N or K</i> ) <input type="checkbox"/>	7									
OPTIONS										
<sup>(4)</sup> Timer function via web interface ( <i>versions K, N or W</i> ) <input type="checkbox"/>	F									
<sup>(3)</sup> Timer: touch housing control block (flush and wall mount version) + 4 meters of cable - up/down <input type="checkbox"/>	I									
<sup>(3)</sup> Timer : touch housing control block (flush and wall mount version) + 15 meters of cable - up/down <input type="checkbox"/>	C									
<sup>(3)</sup> Temperature probe(accuracy ± 0.5°C) + 5 m cable : temperature and hour displayed alternately <input type="checkbox"/>	T									
<sup>(5)</sup> IP Temperature sensor module ( <i>versions K, N or W</i> ) <input type="checkbox"/>	G									
<sup>(3)</sup> Timer output or stopwatch contact <input type="checkbox"/>	E									
<sup>(3)</sup> ASCII RS232 output ( <i>not to be combined with Ascii input version</i> ) <input type="checkbox"/>	A									
or: <input type="checkbox"/>										
<sup>(3)</sup> ASCII RS422-485 output ( <i>not to be combined with Ascii input version</i> ) <input type="checkbox"/>	R									

<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