

# LEDI® 12.S 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

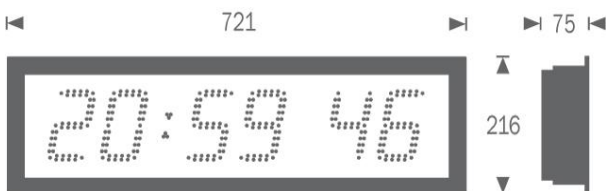
Power supply (following version)	230VAC 50/60Hz 115VAC 50/60Hz Version NTP : PoE (Power over Ethernet)
Certifications	CE, EN 62368, EN 55032, EN 55035, ROHS, IEC 60950-22:2016 (2nd Edition)
Maximum consumption	15.04 VA
IP	65 front face / 54 rear face
MTBF	56 225 h
MTTR	Display: 5 min CPU: 5 min Power supply: 5 min
Weight	2.8 kg
Dimension	721x216x75 mm (LxHxD)
Digit height	Hour/minute: 110 mm Seconds: 110 mm
Maximal distance of legibility	Up to 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 protocols
- 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 protocols
- 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® 12.S Waterproof

		ITEM CODE							
		ND396E							
FACE		↑	↑	↑	↑	↑	↑	↑	↑
Single face	<input type="checkbox"/>	1							
Double face	<input type="checkbox"/>	2							
<b>VERSION</b>									
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							
<b>PROGRAMMABLE LED</b>									
Selectable colour, red, yellow, green	<input type="checkbox"/>	4							
<b>FRONT FACE</b>									
Securit glass 4mm – IP65 indoor or outdoor	<input type="checkbox"/>	E							
Polymere (PMMA) – IP65 outdoor only	<input type="checkbox"/>	M							
<b>MOUNTING</b>									
<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							
<b>COLOUR CASING</b>									
Grey anodised aluminium	<input type="checkbox"/>	7							
<b>POWER SUPPLY</b>									
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) 1 cable Single face ( <i>version N or K</i> )	<input type="checkbox"/>	7							
Power over Ethernet (PoE - IEEE802.3af) 2 cables Double face ( <i>version N or K</i> )	<input type="checkbox"/>	8							
<b>OPTIONS</b>									
<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:									
<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

