GORGY TIME



Maximum operating / storage altitude	3 500 m (11 483 ft)

**For other types of power cables, refer to the power cable reference table*

LEDI® NETWORK ITS v2m

High Accuracy secure time Server with triple synchronization redundant inputs and with multiple synchronization outputs.

2 YEARS WARRANTY

MASTER CLOCKS / TIME SERVERS / SOFTWARES / GNSS ELEMENTS

Key features

- **NTP/SNTP server output included by default on RJ45**
- **Power Supply Redundancy 18-36 or 36-72 VDC with 110-250 VAC**
- **Configurable priorities of synchronization inputs**.
- **Compensation of input delay due to transmission distance and threshold setting for security**
- Time Base and algorithm ensuring output accuracy up to 50ns when synchronized to GPS/GNSS
- **Independence and modularity of output boards**
- PPS and 10Mhz output (available with OCXO oscillator only) via BNC connectors.
- **Alarm management via SNMP TRAP (V1, V2C, V3) and two static relay outputs on screw terminal for synchronization and power supply alarms**
- **Manual or automatic adjustment for transmission delay**
- **Local or UTC time display on front panel**

Internal time base

Its internal battery and its oscillator allow to provide stable time code output in case of synchronization or power supply failure.

Three quartz oscillators at choice:

	OCXO LN	OCXO	TCXO
frequency stability	5.10^{-10} (-10°C to 60°C)	1.10^{-9} (-20°C to 70°C)	1.10^{-6} (0°C to 60°C)
Ageing	3.10^{-10} / day	5.10^{-10} / day	2.10^{-9} / day

Security and network protocols

- **Back up power is included by default. Possibility of extended back up power capacity** (see reference table 92167/). The duration of power reserve will depend on the configuration of the time server, please contact our sales team for more details.
- **Backup of configuration setting** in flash memory
- **Supervision via SNMP V3** or supervision software GT SCADA or Syslog
- **Remote configuration** via secured web page
- Configuration setting command prompt via **SSH**
- Firmware update via FTP or SCP
- **Compatible IP v4/v6** (compatible DHCP v4/v6)
- Configuration on Web interface via HTTP et HTTP(s)
- Secure access to web interface by identifier and password
- Authentication protocol and MD5 encryption
- Network communication ports can be disabled
- PTPv2 IEEE 1588 (TELECOM, ENERGY profiles)

Configuration

- Remote Configuration and time setting via embedded web interface
- IP Configuration by front panel keyboard
- Configuration file can be retrieved and uploaded via secured web interface
- Activating and deactivating configurations
- Auto-IP v4

Specifications

Power Supply	110-250 VAC – 50/60Hz - type IEC 60320 defined C14 And 18-36 VDC or 36-72VDC – 2 points screw terminal block
Power Cable	IEC 60320 defined C13 / MALE SCHUKO 2 (EUROPE) & (Type F)*
Certifications	CE, EN62368 (safety), EN 55032 (EMC transmission), EN 55035 (EMC immunity), ROHS
Max. consumption	20 VA
IP	31
MTBF	110 000 h
MTTR	Mother board: 10 min Display board: 5 min Output board: 5 min
Weight	2.3 kg (Standard configuration)
Dimensions	19'' 1U Rack. 482x44x266 mm (LxHxD)
Display	4 x 20 orange OLED screen with backlight
Operating temperature / hygrometry	-20 to 50°C / 0 to 90% HR (without condensing)
Storage temperature / hygrometry	-20 to 70°C / 10 to 85% HR

Synchronization Inputs

1st time reference input (at choice):
- Multi-constellation GNSS Receiver: (GPS, GLONASS, BEIDOU, GALILEO) or GPS; Cold start, accuracy 10 to 50 ns
- ASCII (NMEA 0183 RMC or ZDA by auto-detection) + TOP
- PPS input

2nd time reference input (at choice):
- AFNOR NFS 87-500/IRIG B/ IEEE1344
- NTPv4 Ethernet 10/100BaseT **3rd reference input (backup)** :
- Frequency input (between 1kHz and 10MHz**)**

Synchronization Outputs

- Multiple outputs (see reference table 92167/)
- **NTP/SNTP server output included by default on RJ45**
- PPS and 10MHz (With OCXO only) on BNC connector

Antennas

- For more information on our GNSS antennas, refer to the technical specifications (see reference table 92225/)

Storage Conditions

Conditions	Temperature	Hygrometry	maximum cumulated duration
Extreme	-20°C to 0°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



Any technical or aesthetic modifications may be made without prior notice, while preserving product functionality, in order to optimize service. Non contractual document

The product must be lit for 4 hours every 3 months to keep its characteristics. see the user manual for more information

LEDI® NETWORK ITS v2m

		ITEM CODE										
		92167	/	P	N	0	5	X	1	L		L
1st SYNCHRONIZATION INPUT				↑	↑	↑	↑	↑	↑	↑		
(1)**GNSS multiconstellations** (GPS, GLONASS, BEIDOU, GALILEO) – *SMA connector*	■			**B**								
(1)**GPS Receiver** – *SMA connector*	■			**P**								
ASCII (auto-detection NMEA 0183 RMC or ZDA) – *DB9 port* **+ TOP** – *BNC connector*	■			**T**								
TOP (PPS) – *BNC connector*	■			**M**								
Without	■			**0**								
(1) Antenna and cable to be ordered separately, see table 92225/												
2nd SYNCHRONIZATION INPUT												
AFNOR NFS 87-500/IRIG B (Modulated 1KHz – 12x) – *2 points screw terminal block*	■				**8**							
IRIG B DCLS (No modulation 00x) – *2 points screw terminal block*	■				**T**							
NTP 10/100 Base T – *port RJ45*	■				**N**							
Without	■				**0**							
3rd SYNCHRONIZATION INPUT												
Without	■					**0**						
(2) External **frequency input 1 kHz - 10MHz** – *BNC connector*	✖					**H**						
(2) Frequency Input: only available with OCXO oscillator, 1 other required input												
POWER SUPPLY												
110-250 VAC 50/60Hz and **18-36 VDC**	■						**5**					
110-250 VAC 50/60Hz and **36-72 VDC**	■						**8**					
OSCILLATOR												
TCXO, 1PPS output – *BNC connector*	■							**T**				
OCXO, 1PPS and 10 MHz outputs – *BNC connectors*	■							**X**				
OCXO LN, 1PPS and 10 MHz outputs – *BNC connectors*	■							**Y**				
BACKUP BATTERY POWER												
Without									**0**			
Backup battery power NiMh (in average max. 1h)	■								**1**			
Extended Backup battery power NiMh (in average max. 2h)	■								**2**			
(3) **SYNCHRONIZATION OUTPUTS**												
(3) max. 3 output boards												
4 x **AFNOR NFS 87-500/IRIGB IEEE1344 (12x version) AC** 2,2V – *8 points screw terminal block*	■									**B**		
2 x **AFNOR NFS 87-500/IRIGB IEEE1344 (12x version) AC** 2,2V – *BNC connectors*	■									**G**		
1 x **ASCII RS232** output – *DB9 port* + **TOP** – *2 points screw terminal block (Protocols selectable)*	■									**E**		
1 x **ASCII RS485** output – *DB9 port* + **TOP** – *2 points screw terminal block (Protocols selectable)*	■									**F**		
1 x **PTPv2 IEEE 1588** output - 8 clients for 128 req/sec. - *1x RJ45 port 1Gbit/s and 1x SFP connector optical fibre* 1x management interface – *RJ45 port (10/100Mbit/s)*	■									**C**		
1x **NTP V4/SNTP** - *RJ45 port*	■									**K**		
2x **NTP V4/SNTP** - *RJ45 ports*	■									**L**		
4x **IRIG B AC 8,8V** outputs (12x version) – *8 points screw terminal block*	■									**H**		
4x PPS, PPM, PPH, PP2S, DCF (TTL, phototransistor, DTTL) – *8 points screw terminal block*	■									**P**		
4x PPS, PPM, PPH, PP2S, DCF (TTL, static relay, DTTL) – *8 points screw terminal block*	■									**Q**		
4x **AFNOR NFS 87-500/IRIG B/IEEE1344 DCLS (00x version)** (TTL, phototransistor, DTTL) – *8 points screw terminal block*	■									**T**		
4x **AFNOR NFS 87-500/IRIGB/IEEE1344 DCLS (00x version)** (TTL, static relay, DTTL – *8 points screw terminal block*	■									**V**		
4x **ASCII RS 232 unidirectional** – *DB9 port* (unique GT Protocole)	■									**A**		
4x **ASCII RS 485/RS 422 unidirectional** – *DB9 port* (unique GT Protocole)	■									**R**		
1x **SMPTE / EBU** module output format SMPTE LTC12M –1999 and **EBU/ UER LTC 3097** – *3 points XLR connector* **Blackburst / Glenlock** synchronization input – *BNC Connector*	■									**S**		
Tropicalization	■									**U**		

NTP/SNTP client software Windows®. 10 licenses.
This option is required for a secure synchronization of PC under Windows.

NTP/SNTP client software Compatibles OS Windows® **10 licenses**	▣	**CDG021**		

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