GORGY TIME

LEDI® NETWORK ITS v2m 2U

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

2 YEARS WARRANTY

Base 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 92197/). 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)

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	25 VA according configuration
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'' 2U Rack. 482x88x266 mm (LxHxD)
Display	4 x 20 orange OLED screen with backlight
Operating temperature/ hygrometry	-10 to 50°C / 0 to 90% HR (without condensing)
Storage temperature/ hygrometry	-20 to 70°C / 10 to 85% HR
Maximum operating / storage altitude	3 500 m (11 483 ft)

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

Key features

- **NTP/SNTP server output included by default on RJ45**
- **Power Supply Redundancy 18-36 or 36-72 VDC or 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**

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

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):
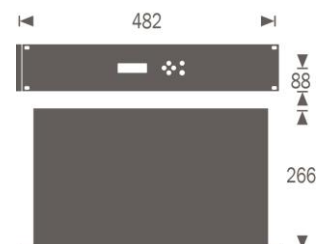- Frequency input (between 1kHz and 10MHz**)**

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

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

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

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CODE ARTICLE

92197 /

Configuration	Code
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/

Configuration	Code
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

Configuration	Code
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	Code
110-250 VAC 50/60Hz and **18-36 VDC**	5
110-250 VAC 50/60Hz and **36-72 VDC**	8
2 x 110-250 VAC 50/60Hz C14	3

OSCILLATOR	Code
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	Code
Without	0
Backup battery power NiMh (in average max. 30min)	1
Extended Backup battery power NiMh (in average max.1h)	2

(3) SYNCHRONIZATION OUTPUTS *(3) max. 8 output boards*	Code
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**