



## LEDI® NETWORK ITS V2m - 1U 1 PTP output

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

### 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
frequency stability	5.10 <sup>-10</sup> (-10°C à 60°C)	1.10 <sup>-9</sup> (-20°C à 70°C)
Ageing	3.10 <sup>-10</sup> / day	5.10 <sup>-10</sup> / day

### Security and network protocols

- **Basic power reserve included by default.** Possibility of extending the duration. *Duration varies depending on the options chosen, contact us 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, ENERGIE... profiles)

### Specifications

<b>Power supply</b>	110-250VAC – 1,4 A max. – 50/60Hz – type IEC 60320 defined C14 and 18 - 36 VDC or 36 – 72 VDC – 2 points screw terminal block
<b>Power Cable</b>	IEC 60320 defined C13 / MALE SCHUKO 2 (EUROPE) & (Type F)*
<b>Certifications</b>	CE, EN62368 (safety), EN 55032 (EMC transmission), EN 55035 (EMC immunity), ROHS
<b>Maximal Consumption</b>	20 VA
<b>IP</b>	31
<b>MTBF</b>	110 000 h
<b>MTBF/ MTTR</b>	Mother board: 10 min Display board: 5 min Output board: 5 min
<b>Weight</b>	2,3 kg
<b>Dimensions</b>	19" 1U Rack. 482x44x266 mm (LxHxD)
<b>Display</b>	Orange OLED screen with backlight
<b>Operating Temperature / hygrometry</b>	-20 to 50°C / 0 to 90% HR
<b>Storage temperature / hygrometry</b>	-20 to 70°C / 10 to 85% HR
<b>Maximum operating/storage altitude</b>	3 500 m (11 483 ft)

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



### Key features

- 1 PTP output on RJ45 or SFP (optical fiber)
- NTP/SNTP 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
- Sorties PPS et 10 MHz (uniquement avec OCXO) sur 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
- Automatic Time offset and DST on outputs
- IP Configuration by front panel keyboard
- Configuration file can be retrieved and uploaded via secured web interface
- Auto-IP v4

### Synchronization inputs

#### 1<sup>st</sup> time reference input (at choice):

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

#### 2<sup>nd</sup> time reference input (at choice):

- AFNOR NFS 87-500/IRIG B/ IEEE1344
- NTP (V2, V3, V4) 10/100BaseT

#### 3<sup>rd</sup> reference input (backup):

- Frequency input (between 1kHz and 10MHz)

### Synchronization outputs

- Multiple outputs
- NTP/SNTP output included by default on RJ45
- PPS and 10Mhz output (available with OCXO oscillator only) via BNC connectors

NB: The RJ45 ports of the optional NTP outputs are independent and isolated by means of protocol break.

### GNSS Antenna (option)

- 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.

