



LEDI® NETWORK ITS V2m - 1U 2 PTP outputs

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 ⁻¹⁰ (-10°C à 60°C)	1.10 ⁻⁹ (-20°C à 70°C)
Ageing	3.10 ⁻¹⁰ / day	5.10 ⁻¹⁰ / day

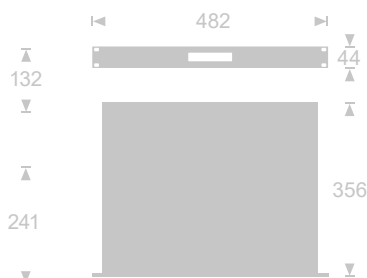
Security and network protocols

- 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

Power supply	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
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
Maximal Consumption	20 VA
IP	31
MTBF	110 000 h
MTBF/ MTTR	Mother board: 10 min Display board: 5 min Output board: 5 min
Weight	2,3 kg
Dimensions	19" 1U Rack. 482x44x356 mm (LxHxD)
Display	Orange OLED screen with backlight
Operating Temperature / hygrometry	-20 to 50°C / 0 to 90% HR
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

- 2 PTP outputs 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

1st 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

2nd time reference input (at choice):

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

3rd reference input (backup):

- Frequency input (between 1kHz and 10MHz)

Synchronization outputs

- Multiple outputs (see reference table 92167/)
- 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.

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2 PTP outputs

ITEM CODE

92080 /

1 st SYNCHRONIZATION INPUT										
<input type="checkbox"/>	⁽¹⁾ GNSS multiconstellations (GPS, GLONASS, BEIDOU, GALILEO) – SMA connector	■	B							
<input type="checkbox"/>	⁽¹⁾ GPS Receiver – SMA connector	■	P							
<input type="checkbox"/>	ASCII (auto-detection NMEA 0183 RMC or ZDA) – DB9 port + TOP – BNC connector	■	T							
<input type="checkbox"/>	TOP (PPS) – BNC connector	■	M							
<input type="checkbox"/>	Without	■	0							
2 nd SYNCHRONIZATION INPUT										
<input type="checkbox"/>	AFNOR NFS 87-500/IRIG B (Modulation 1kHz – 12x) – 2 points screw terminal block	■	8							
<input type="checkbox"/>	IRIG B DCLS (No modulation 00x) – 2 points screw terminal block	■	T							
<input type="checkbox"/>	NTP 10/100 Base T – RJ45 port	■	N							
<input type="checkbox"/>	Without	■	0							
3 rd SYNCHRONIZATION INPUT										
<input type="checkbox"/>	Without	■	0							
<input checked="" type="checkbox"/>	⁽²⁾ Frequency input 1kHz - 10MHz – BNC connector	×	H							
POWER SUPPLY										
<input type="checkbox"/>	110-250 VAC 50/60Hz and 18-36 VDC	■				5				
<input type="checkbox"/>	110-250 VAC 50/60Hz and 36-72 VDC	■				8				
OSCILLATOR										
<input type="checkbox"/>	Standart: OCXO, 1PPS and 10 MHz outputs – BNC connectors	■						X		
<input type="checkbox"/>	OCXO LN, 1PPS and 10 MHz outputs – BNC connectors	■						Y		
BACKUP BATTERY POWER										
<input type="checkbox"/>	Without	■							0	
<input type="checkbox"/>	Backup battery power NiMh (in average max. 1h)	■							1	
<input type="checkbox"/>	Extended Backup battery power NiMh (in average max. 2h)	■							2	

⁽¹⁾ Antenna and cable to be ordered separately, see table 92225/

⁽²⁾ Frequency Input: only available with OCXO oscillator, 1 other required input

SOFTWARE

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	<input type="checkbox"/>	CDG021
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