

LEDI® NETWORK TS



**High accuracy time server, delivering multiple time codes
Supporting NTP V4 / IPV6 / SNMP**

Internal Time Base

LEDI® NETWORK Time Server (TS) is equipped with internal time base allowing timekeeping in case of loss of synchronization.

Two quartz oscillators at choice :

- **TCXO** (with GPS option):

Frequency stability 1.10^{-7} (0°C to 60°C)

Ageing 2.10^{-9} / day.

- **XO** :

Frequency stability 2.10^{-6} (20°C to 30°C)

Ageing $1,5.10^{-8}$ / day.

Security

Power reserve: 1 hour in standard configuration (extendable to 2 hours in option J).

Backup configuration settings in flash memory.

Supervision via SNMP V3 or supervision software GT Supervision.

Remote configuration via a Secure Website.

Key features

- **Plug and Play.**
- **1 NTP/SNTP output is included in the basic configuration.**
- **Multiple synchronization outputs** of different time code types.
- **Threshold setting for security.**
- **Alarm management via SNMP TRAP (V1, V2C and V3),**
- **Alarm management** via static relays and screw terminal for synchronization and power supply, as option.
- Time base and algorithm to ensure **output accuracy up to 100 ns in GPS synchronization.**

Configuration

Remote configuration and time setting via a built in web interface.
Automatic choice of time zone and daylight saving time.
Supervision via HTTP et HTTP(s), SNMP, Telnet. "GT Supervision" software Windows® NT/XP/2000/2003/Vista/ Windows 7.
Firmware update via FTP.
Compatible IP v4/v6 (compatible DHCP v4/v6).
IP Configuration by keyboard on front panel.

Specification

Power supply	230VAC/50-60Hz 115VAC/50-60Hz 18-72 VDC
Certifications	CE, EN 60950 (safety), EN 55022 (EMC transmission), EN 55024 (EMC immunity), ROHS
Maximal consumption	20 VA
IP	31
MTBF	120 000 h.
MTRR	Mother board: 10 min. Display board: 5 min. Output board : 5 min.
Weight	2,3 Kg (standard configuration)
Dimension	Rack 19" 1U 482x44x266 mm (LxHxD)
Display	4 x 20 character LCD display with blue backlight
Operating temperature	-10° to 50°C
Storage temperature	-20° to 70°C

Synchronization inputs

- **Standalone quartz time base synchronized by :**
 - DCF (Europe).
 - NTP Ethernet 10/100 base T
 - GPS : Accuracy 100 ns.
 - AFNOR NFS 87500 / IRIG B.

Synchronization outputs

- AFNOR NFS 87500/IRIG B modulated. Accuracy: 20µs.
- AFNOR NFS 87500 and IRIG B DCLS (TTL/RS 422) accuracy: 10µs.
- NTP (V2, V3, V4) (accuracy up to 50µs): Unicast, Multicast, Broadcast
- ASCII RS485 + pulse.
- ASCII RS232 + pulse.
- Pulses 1000 Hz.
- Alarm.
- SMPTE/EBU.



LEDI® NETWORK TS

ITEM CODE				
9220	<input type="checkbox"/>	/	<input type="checkbox"/>	<input type="checkbox"/>
	↑		↑	↑

SYNCHRONIZATION INPUT		8	D	8	T	N	G	N
DCF	■							
AFNOR NFS 87500/IRIG B (1Kz modulated)	■							
AFNOR NFS 87500/IRIG B DCLS (TTL or RS 422)	■							
NTP Ethernet 10/100 base T input – with XO oscillator	✗							
GPS - compatible with "GPS ANTENNA OPTION" with XO oscillator : Option 0, D	✗							
GPS - compatible with "GPS ANTENNE OPTION" with TCXO oscillator : Option 0, Q, R, S, V, T	✗							
POWER SUPPLY								
230 VAC/50-60Hz	■						0	
115 VAC/50-60Hz	■						1	
18-72 VDC	✗						9	
GPS ANTENNA OPTION								
none	■	With XO oscillator		0				
Antenna with 50m of cable	✗			D				
none	✗	With TCXO oscillator		0				
Hardmount antenna with 25m of cable RF240 + binding kit	✗			Q				
Hardmount antenna with 50m of cable WBC 400(LMR / RF) + binding kit	✗			R				
Hardmount antenna with 50m of cable WBC 400(LMR / RF) + surge protection + binding kit	✗			S				
Bullet III antenna with 80m of cable WBC 400(LMR / RF) + binding kit	✗			V				
Bullet III antenna with 80m of cable WBC 400(LMR / RF) + surge protection + binding kit	✗			T				
SYNCHRONIZATION OUTPUT OPTION								
1 x NTP V4/SNTP server output on RJ45	■							K
1 contact alarm output (synchronization or power supply defect)	■							G
Pulses 1000 Hz output	■							H
AFNOR NFS 87500/IRIG B (1Kz modulated) output	■							B
ASCII RS 485 + pulse output	■							R
ASCII RS 232 + pulse output	■							A
DCLS AFNOR & IRIG B (TTL / RS 422) outputs	■							T
Tropicalization of electronic boards	■							U
SMPTE / EBU output module SMPTE LTC12M size –1999 and EBU/ UER LTC 3097	■							S
Blackburst / Glenlock input synchronization	■							
Power reserve extension of 2 hours	■							J