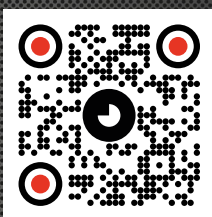


TIME SERVERS

LEDI® NETWORK RADIO TIMING®

Time & frequency synchronization



MADE IN FRANCE

GORGY TIME

www.gorgy-time.com

You can trust the European number one to synchronize your equipment



GORGY TIME has been designing high-precision time references for more than forty years. These time installations have garnered international renown in industries such as airports, railways, metro lines, radio and television studios, hospitals, power stations, industries, ...

ARE YOU LOOKING FOR A SECURED AND RELIABLE SYSTEM? CHOOSE A GORGY TIME SOLUTION:

A time server is an integrated component of an ICT network, and its role is to distribute the time to the other network components. For this, it has a synchronization input (GNSS, IRIG...) as well as an internal clock based on a precise oscillator. Time distribution is made possible thanks to the NTP network protocol. Beside an NTP output, **GORGYTIME time servers provide a range of additional outputs enabling systems which do not have an Ethernet interface to be synchronized** (IRIG B, 1 PPS, ASCII, SMPTE, E1/T1).

Most operations which involve event time-stamping require precision to a hundred milliseconds. In order for systems including a sampling unit to work correctly, the required precision may reach tens of nanoseconds. Audio or video recording systems generally require precision to a millisecond. If the objective is to supply time information to clocks or communications displays, a tenth of a second will usually suffice.

To achieve good time precision, we recommend using a GNSS (GPS/GLONASS/BEIDOU/GALILEO) synchronization input. Currently, this offers the best value for money in terms of performance.

GORGYTIME systems adapt to the precision you need

The precision you need depends on the application and on the operations to be carried out.

MODULAR TIME SERVERS WITH WEB INTERFACE

MULTIPLE CONFIGURATIONS

- In addition to the GPS, the GORGYTIME time servers can use GALILEO, BEIDOU, GLONASS, NTP, PTP, IRIG-B/AFNOR NFS87500, 1PPS, NMEA message and DCF as time sources.
- A 1 to 10MHz frequency input as backup is also available.
- The servers are also capable of generating a large number of output signals: IRIG-B, ASCII messages, NTP, pulsed code, SMPTE, 1PPS and 10MHz.

TIME INFORMATION REDUNDANCY AND CONTROL

- IRIG-B, PTP and NTP receivers are also available as options, giving you a real alternative to GNSS.
- All of our receivers are based on at least 3 consecutive and coherent pieces of information for synchronization, guaranteeing time information integrity.

FLEXIBILITY AND EXCEPTIONAL SECURITY

- Up to 25 dedicated and isolated Ethernet ports, more than enough to reply to thousands of NTP requests per second while maintaining the clock's precision to the microsecond.
- Having multiple ports gives you great flexibility and adaptability to your networks while ensuring security for sensitive networks.

MAIN FEATURES

- Configuration and administration of time servers with a web interface for ease of use.**
- Stratum 1 function via GPS satellites.
- Up to 19 10/100Base-T independent ports.
- Graphic frontal panel display.
- IPv6 and IPv4 compatible.
- Secure web interface access (HTTPS).
- Https, SNMP v3.
- Private MIB.
- Supports Telnet, Syslog and FTP protocols.
- Maintain of Stratum 1 function if there is no primary reference.
- Nanosecond precision to UTC time.
- E-mail and SNMP trap alarms.
- Major alarms on static relays.
- System 100% operational in under 40 seconds from power-up.
- Event recording on SD card.

GORGY TIME



GORGY TIME SERVER	Synchronization inputs	Quartz	Available output time codes	Maximum number of inputs	Maximum number of independent NTP ports	Accuracy on GNSS input +/- 10ns	IP connectivity	Hot plug system	Redundancy power supplies 230VAC+18-36VDC	SNMP supervision	Target applications
LEDI® Network ATS	GNSS, GPS, NTP, PTPv2, ASCII+TOP, Frequency	Rubidium (1.10 ⁻¹²)	IRIG-B, PTP, NTP, ASCII multi-protocol, PPS, 10MHz, SMPTE-EBU, Configurable Pulses, DCF, E1/T1, PTPv2	3	5	10 ns	IPv4/IPv6		✓	SNMP versions 1, 2C, 3 supported	Military & defense, on board system, high-frequency trading, Telecom, power plant
LEDI® Network ITS V2m	GNSS, GPS, NTP, IRIG-B, ASCII+TOP, Frequency	OCXO (1.10 ⁻¹⁰) TCXO (1.10 ⁻⁸)	IRIG-B, PTP, NTP, ASCII multi-protocol, PPS, 10MHz, SMPTE-EBU, Configurable Pulses, DCF	3	19 2"rack	1 µs	IPv4/IPv6		✓	SNMP versions 1, 2C, 3 supported	Broadcasting, banks, administrations, ICT servers, airports, power stations
RT 4000	GNSS, GPS, NTP, IRIG-B, ASCII+TOP	OCXO (1.10 ⁻¹⁰) TCXO (1.10 ⁻⁸)	IRIG-B, NTP, ASCII multi-protocol, PPS, 10MHz, SMPTE-EBU, Configurable Pulses, DCF, impulsed DCF 24v	8	25	1 µs	IPv4/IPv6	✓	up to 10 independent feed inputs	SNMP versions 1, 2C, 3 supported	Airports, power stations, railways
LEDI® Network TS	GPS, NTP, DCF, IRIG-B	TCXO (1.10 ⁻⁸) XO (1.10 ⁻⁶)	IRIG-B, NTP, ASCII multi-protocol, PPS, SMPTE-EBU, Configurable Pulses, DCF 24v	1	2	1 µs	IPv4/IPv6		VAC or VDC	SNMP versions 1, 2C, 3 supported	Administrations, ICT servers, broadcasting
LEDI® Network TDS	GPS or NTP	TCXO (1.10 ⁻⁸)	NTP, IRIG-B, ASCII, impulsed	1	1	1 µs	IPv4/IPv6		VAC	SNMP versions 1, 2C, 3 supported	Substations, digital clocks
LEDI® Network TDS GPS - DIN TH 35	GPS or NTP	TCXO (1.10 ⁻⁸)	NTP, IRIG-B, ASCII, impulsed	1	Z1	1 µs	IPv4/IPv6		VAC	SNMP versions 1, 2C, 3 supported	Substations, digital clocks

TIME SERVERS

LEDI® NETWORK French design and manufacture

► What is a time server?

It is a system that lets you **synchronize a diverse array of equipment** (computer systems, clocks, automatic products...) **using a time reference** to ensure that all of your peripheral devices are at the same time (the coordinated universal time).

► What is the NTP?

The NTP (Network Time Protocol) is a network protocol used to accurately synchronize the local clocks with a network time server.

The NTP network is an open hierarchical network as shown on the opposite pattern.

► What is the PTP?

The PTP (Precision Time Protocol) is a network protocol used to precisely synchronize PTP slaves with PTP Grandmasters.

The PTP is highly recommended for transport, defense, industry and telecommunication applications.

APPLICATIONS

Key fields where synchronization can directly affect network operations :

- Journal file time-stamping, verification and surveillance.
- Recovering network transmission errors.
- Directory management.
- Access security and authentication.
- Planned operations (scripts...).
- Network messaging (Microsoft Exchange, Postfix, Lotus Notes...).
- Microsoft Active Directory.
- Log centralization (e.g. syslog).
- Server supervision.
- Video surveillance systems.

OPTIONAL SERVICES*

- Presales support.
- Training and Commissioning Assistance.
- Technical support.
- Configuration of the product in factory, on-site or remotely.
- Maintenance contract.
- Installation.

*Information available from the GORGY TIME sales department.

CERTIFICATIONS



All GORGYTIME's products meet requirements under:

- **EN 62368-1 (2020)** **EN 55035:2017/A11:2020**
- **EN 62311:2008** **EN 61000-6-2:2005/AC:2005**
- **EN 50121-4:2016/A1:2019** **RoHS.**
- **EN 55032:2015/A11:2020**
- Our company is certified **ISO 9001** and **ISO 14001**.

MADE IN FRANCE

GORGY TIME

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