

8030NTS-02/GPS

hopf
Elektronik GmbH



Because every fraction of a second counts ■

The compact way of network synchronization

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Time server appliance with up to 2 isolated and mutually independent time server modules and up to 4 ethernet interfaces ensuring enhanced security for business critical and even most demanding applications!

- Space-saving clock system in closed aluminium profile housing for easy and horizontal DIN rail mounting according to DIN EN 60715 TH35
- At-a-Glance status LEDs at front panel
- Available for synchronization with various time sources:
 - GPS: 22-channel GPS receiver for L1 frequency (1,575.42 MHz) antenna signal
 - GNSS: 72-channel GNSS receiver for GPS/GALILEO/GLONASS antenna signal
 - NCD: Network Time Client (NTC) module for Network Time Protocol (NTP)
- One timeserver module integrated per default with:
 - 2 ethernet interfaces 10/100/1000 Mbit/s autosensing
 - Network Time Protocol version 4 (RFC5905)
- Easy setup and configuration of the network time server modules via web interface, no serial connection necessary
- Synchronization of IEC 61850 compatible devices
- Cost-efficient extension of the base system with additional output modules ex works possible (modular order concept)
- Integrated synchronization status output via optical coupler
- Redundant multiple validation of synchronization signal for error-free and leap-free signal evaluation
- SyncOFF timer ensuring accurate operation even in most difficult GPS reception conditions (reception failure bypassing)
- High freewheel accuracy provided by GPS-aided regulation of internal quartz base, various crystals available
- Automatic changeover of daylight-saving time supported (configurable parameters for changeover switching points)
- Automatic evaluation and handling of leap second

EXTENSIONS & OPTIONS



front view base system 8030NTS-02/GPS

The DIN rail network timeserver 8030NTS-02/GPS is ideal for everyone searching for a space-saving, flexible and cost-efficient solution with numerous configuration and extension options. Due to the configuration and extension options you can specify the functions of your individual 8030NTS-02/GPS timeserver at time of purchase.

To ensure enhanced security and availability in redundant networks one isolated, independent network timeserver module 8030NTS-02/M may additionally be integrated in the base system at time of purchase.

- network timeserver module 8030NTS-02/M:
 - 2 ethernet interfaces 10/100/1000 Mbit/s autosensing
 - Network Time Protocol version 4 (RFC5905)

EXTENSIONS & OPTIONS

Features activated in the appliance firmware by default free of charge:

- System monitoring / Alarming
 - SNMPv3, SNMP Traps (MIB II, **hopf** Private Enterprise MIB)
 - E-mail notification
 - Syslog messages to external syslog servers
- Configuration of static routing table
- Tagged VLAN according to IEEE 802.1Q
- Port aggregation / Bonding / NIC Teaming of LAN port ETH0 and ETH1 with support of IEEE 802.3ad

Firmware activation options per network time server module:

- LI8030A01:
Support of Parallel Redundancy Protocol (PRP) according to IEC 62439-3
- LI8030A02:
Support for Precision Time Protocol (PTP) according to IEEE 1588TM-2019
Support for IEEE Standard Profile for Use of IEEE 1588TM Precision Time Protocol (PTP) in Power System Applications (Power Profile) according to IEEE Std. C37.238TM-2011
C37.238TM-2017
IEC 61850-9-3:2016
- LI8030A03:
Support of the SINEC H1 Time Datagram Protocol

The activation options mentioned above can be activated on site after purchase of the appliance by entering a serial number-dependent activation key per network time server module for which the additional function is required.

EXTENSIONS & OPTIONS

In case other time synchronization options are required the DIN rail network timeserver 8030NTS-02/GPS may as well be configured with numerous available time synchronization modules for the output of:

- IRIG-B (modulated / unmodulated)
- DCF77 (modulated / unmodulated)
- Cyclic Pulses (PPS, PPM, etc.)
- Serial time datagram

The mentioned output modules are available in various electrical signal output versions as well as modules for fiber optic output.

Please note: If you choose to equip your system with one additional network timeserver module 8030NTS-02/M respectively with additional signal output modules mentioned above, the appliance will be delivered with a housing with extended dimensions:

D 130mm x W 135mm x H 105mm

You may also decide on purchase which power supply to be configured for you:

**Power supply
standard delivery with:**

- 85 – 264V AC (50/60 Hz)
- 100 – 250V DC

**Power supply
optionally available with:**

- 24V DC (18 – 36V DC)
- 48V DC (36 – 76V DC)

EXTENSIONS & OPTIONS

Firmware updates via e-mail or download are available free of charge for the whole product life cycle of the appliance. Firmware can easily be updated via web interface.

In case you face any not listed requirements for time synchronization of your specific application, please do not hesitate to contact us via e-mail at info@hopf.com. We will be glad to work on a quotation for your individual solution!

We are looking forward to receiving your inquiry!

Referring to the information in this brochure: After the editorial deadline of this publication, April 04, 2022, changes may have been made to the product. Subject to changes of structural or design changes, changes to the scope and scale of discounts by the manufacturer during the delivery period as long as the changes or deviations are reasonable under consideration of the interest of the seller to the buyer.

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