8030HEPTA-2

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Because every fraction of a second counts ■

network synchronization in a compact design

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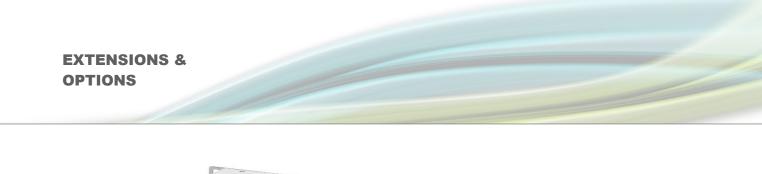twitter.com/hopfelektronik

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Time server appliance with up to 5 isolated and mutually independent time server modules and up to 10 ethernet interfaces ensuring enhanced security for business critical and even most demanding applications!

- Space-saving 19" 1U/84HP rack chassis

- At-a-Glance status LEDs at front and rear panel

- LCD display at front panel with background illumination for quick and easy commissioning and monitoring of operation status on site

- 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 integrated time server module 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

- Four free slots available by default for cost-efficient extension of the base system with additional output modules ex works (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

rear view 8030HEPTA-02 base system with
2 ethernet interfaces 10/100/1000 Mbit/s autosensing integrated by default,
1 USB-port and status LEDs

The network time server 8030HEPTA-02 is ideal for everyone searching for a space-saving and budget-friendly solution with numerous configuration and extension options.

Up to four additional isolated and mutually independent network time server modules 8030NTS-02/M may be integrated into the base system ensuring enhanced security and availability in redundant networks.

■ network time server module 8030NTS-02/M:

  ☐ 2 ethernet interfaces 10/100/1000 Mbit/s autosensing

  ☐ Network Time Protocol Version 4 (RFC5905)

rear view base system 8030HEPTA-02
extended with 4 mutually independent
network time server modules 8030NTS-02/M

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 1588^{TM}-2019
  Support for IEEE Standard Profile for Use
  of IEEE 1588^{TM} Precision Time Protocol
  (PTP) in Power System Applications
  (Power Profile) according to IEEE Std.
  C37.238^{TM}-2011
  C37.238^{TM}-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.

front view 8030HEPTA-02 with at-a-glance status-LEDs and LCD Display

In case other time synchronization options are required the 8030HEPTA-02 network time server may as well be configured with numerous available time synchronization modules for the output of:

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

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

Power supply standard delivery with:

- 85 – 264VAC (50/60 Hz)

Power supply optionally available with:

- 24VDC (18 – 36VDC)
- 48VDC (36 – 76VDC)
- 100 – 250VDC

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 email at **sales@hopf.com**. We will be glad to work on a quotation for your individual solution.

We are looking forward to receiving your inquiry!

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