

7274(RC) NTP/SINEC H1 LAN board

Technical Data.

| Assembly | |
|------------------------------|---|
| Model: | Euro-board 160mm x 100mm for operation in hopf base systems |
| Internal system voltage Vpp: | 5V DC \pm 5% via system bus |
| Temperature range: | Operation: 0°C to +50°C |
| | Storage: -20°C to +75°C |
| Humidity: | max. 95%, not condensing |

| LAN – ETH0/ETH1 | |
|--|---|
| Network connection: | via LAN cable with RJ45 connector, male (recommended cable type CAT5 or better) |
| Request per second: | max. 10,000 requests (for 1000Mbit connections) |
| Number of connectable clients: | theoretically unlimited |
| Network interface ETH0: | 2x 10/100/1000 Mbit/s autosensing |
| Ethernet compatibility: | version 2.0 / IEEE 802.3 |
| Isolation voltage (network-to system-side): | 1500 Vrms |
| Boot time: | typical: 35 seconds - When using static IP addresses for ETH0 and ETH1. Depending on the network configuration in use (e.g. DHCP) an extension of the boot phase can occur. |



function board 7274
3U, 4HP

| Power consumption internal | |
|----------------------------|-----------------------------|
| Standard operation: | typical: 550mA (max. 850mA) |
| Boot phase: | typical: 550mA (max. 850mA) |

| MTBF value | |
|------------|-----------------|
| MTBF: | > 740,000 hours |

Interfaces

- 2x Ethernet 10/100/1000 Mbit/s
autosensing via RJ45
- 1x USB-Port for update and recovery function

Networking Features

- Tagged VLANs according to IEEE 802.1Q
- Port aggregation / Bonding / NIC teaming of LAN port ETH0 and ETH1 with support of IEEE 802.3ad
- Configuration of static routing table
- Parallel Redundancy Protocol (PRP) according to IEC 62439-3 for use as Dual Attached Node (DAN) - **optional**
- Precise Time Protocol (PTP) according to IEEE 1588-2019 - **optional**

System Monitoring / Alarming

- SNMPv3, SNMP Traps (MIB II, Private Enterprise MIB)
- E-mail notification
- Syslog messages to external Syslog Server

Time Protocols

- NTPv4.2.x Server
- NTP Broadcast
- NTP Multicast mode
- SNTP Server
- SINEC H1 time datagram – **optional**
- RFC-867 DAYTIME Server
- RFC-868 TIME Server
- Precise Time Protocol (PTP) according to IEEE 1588-2019 – **optional**
 - IEEE C37.238-2011
 - IEEE C37.238-2017
 - IEC 61850-9-3:2016

RFC Listing of Supported Protocols

- NTPv4 - Protocol and Algorithms Specification (RFC 5905)
- NTPv4 - Autokey Specification (RFC 5906)
- PPS API (RFC 2783)
- DHCP (RFC 2131)
- Time Protocol (RFC 868)
- Daytime Protocol (RFC 867)
- HTTP (RFC 2616)
- HTTPS (RFC 2818)
- SSH-2 (RFC 4250-4256, 4335, 4344, 4345, 4419, 4432, 4716, 5656)
- TELNET (RFC 854)
- SNMP (RFC 1213, RFC1901-1908)
- SYSLOG (RFC 5424)
- SMTP (RFC 5321)