

## ■ PolyNet NTP1004 Network Time Protocol server



Stratum 1 NTP server

IPv6 and IPv4 Compliant

Time Reference: GNSS (NMEA + 1PPS)

Holdover Capability (OCXO)

Intuitive Web Interface for Easy Control and Maintenance

Remote Management

Synchronize Thousands of Clients NTP Server accuracy <math>< 10 \mu\text{s}</math>

Robust Industrial Computer

Embedded Linux Platform

Fan-less Design

## EQUIPMENT FOR HIGH PERFORMANCE SYNCHRONISATION OF TELECOMMUNICATIONS NETWORK

### ■ Features

- High-Bandwidth, Stratum 1 NTP server
- IPv6 and IPv4 Compliant
- Time Reference: GNSS (NMEA + 1PPS)
- Intuitive Web Interface for Easy Control and Maintenance

### ■ Integrated GNSS Receiver

- GNSS Receiver: 32 channel GPS/GLONASS receiver
- Receiver frequency: GPS L1 C/A; GLONASS L1OF
- Updating frequency: 1 Hz
- Cable length between GNSS antenna and Indoor unit: 50 meters (Low attenuation coaxial)

### ■ Typical Characteristics

- Synchronize Thousands of Clients
- NTP throughput: 6000 requests /sec
- NTP Server accuracy <10 $\mu$ s
- NTP client accuracy (on same subnet): < 1ms

### ■ Industrial Embedded Computer

#### Physical Characteristics

Enclosure	SECC sheet metal
Weight	5.5 kg
Dimensions	440 x 360 x 45 mm (17.32 x 9.96 x 1.77 in)
Mounting	Standard 19-inch rackmount

#### Environmental Limits

Operating Temperature	-10 to 50°C (14 to 140°F)
Operating Humidity	5 to 95% RH

#### Power Requirements

Input Voltage	100 to 240 VAC/VDC auto-ranging (47 to 63 Hz for AC input)
Power Consumption	Max. 50W

### ■ Network Protocols

- NTP v2c (RFC 1119), NTP v3 (RFC 1305), NTP v4
- NTP v4 SNTP (RFC 2030)
- NTP Unicast, Broadcast, Multicast
- UDP / TCP Time Protocol (RFC 868)
- MD5 authentication (RFC 1321)
- TELNET (RFC 854)
- SSH (RFC 4250-4254)
- HTTP (RFC 2616)

### ■ Management

- Local or remote
- Embedded web server GUI
- Telnet/SSH/Craft CLI
- Network management can be performed through the Ethernet port