

TIME & FREQUENCY REFERENCE SYSTEM

PTP NTP OCHO

Network Time Protocol server **PNT-5021** is a network frequency-time synchronization equipment and it can be used as **Stratum 1** source.

Accurate timing across your network.

High stability **OCHO** for increased accuracy when unsynchronised.

1-pulse-per-second and 10 MHz outputs.

Receive time information from **GNSS satellites** anywhere on the surface of the Earth. Ideal for closed networks.

Support for NTP and SNTP compatible clients. Web-based status and configuration interface. SNMP monitoring interface.

Single board computer with **Linux** operating system.



- ▶ **TRUE STRATUM 1 NTP TIME SERVER**
- ▶ **PTP SERVER TIME PRECISION**
- ▶ **10 MHz, 1 PPS**

TECH SPECIFICATIONS

Internal receiver: GLONASS, GPS
Internal generator: oven-controlled Crystal Oscillator (OCXO)
Sync outputs: NTP server, PTP master, 1PPS, 10 MHz
Power supply: 6..12V DC
Physical dimensions: 145 x 153 x 43 mm
10 MHz Output
Form: Square Wave
Signal level: 1V into 50 Ohm
Allan variance per 1 s: less than $\pm 1 \cdot 10^{-11}$
Time instability per day without external synchronization: less than $\pm 1 \cdot 10^{-9}$
1 PPS Output
Accuracy, time locked: 110 ns reference to UTC
Deviation per hour without external synchronization: less than 300 ns
Signal level: 1V into 50 Ohm

APPLICATIONS

- Automated information-measuring systems
- Synchronizing computers and other devices connected to network via NTP
- Time reference in spatially distributed measuring systems
- Security systems, industrial control systems and other areas requiring time synchronization
- LAN/WAN/MAN time reference

PROVIDES

- Generating **10 MHz** reference signal
- Generating **1 PPS** reference signal
- Generating linear timecode (LTC) signal according to EBU/ SMPTE309M
- Functioning as NTP 1st level server **Stratum 1** time stamp over Ethernet
- Functioning as **PTP** (precision time protocol) MASTER including for distributing clock reference signals in IP networks
- Autonomous operation driving by internal generator