The **NTP100-GPS** is an NTP (Network Time Protocol) server that synchronizes to GPS satellites and distributes NTP reference signals via Ethernet. When synchronized to the atomic clocks in GPS and GLONASS satellites, the long term accuracy of the device is the same as the atomic clock of the GNSS. An internal TCXO (temperature-compensated crystal oscillator) provides holdover stability of ± 1 min/year during GPS signals loss. An optional OCXO (oven-controlled crystal oscillator) increases holdover stability to ± 250ms/year.

Features

- Compact NTP client / server
- Synchronizes to GPS satellites for Stratum 1 accuracy
- NTP output accuracy of ± 2 milliseconds
- 6-digit clock display (red)
- Adjustable time display brightness
- NMEA 0183 via RS232 or Ethernet

Specifications

Holdover Accuracy

- With loss of power, device reverts to an internal precision TCXO temperature-compensated crystal oscillator with accuracy of ±1min/year or < 165ms per day
- High-stability option with OCXO provides typical stability of 1 ppb/ day (± 250ms/year) after 30 days of aging

Network Compatibility

- Supports NTP, DHCPv4, DHCPv6 for automatic acquisition of network address, name servers, and timeserver configuration
- Telnet/SSH communication
- IPv4/IPv6 compatible

Configuration

- Configure devices through provided WinDiscovery software or Telnet/SSH
- Configuration is saved to nonvolatile memory and survives power losses
- Authenticated network messages prevent unauthorized tampering of clock configuration

Antenna

- Optional weather-proof, pre-amplified antenna included with 16 ft (5 m) of coaxial cable
- Optional antenna kit is available with antenna, 50 ft (15 m) cable and antenna

Connectors

- RJ45 - 10/100MB Ethernet
- DC input - 2.1mm male jack
- RS-232 - 9 pin male
- Antenna - SMA
- USB for configuration

Power

- DC input (9-28 VDC)
- Power consumption: < 7.5W
- Includes external 24 VDC wall-mount power supply with locking DC plug (UL and CE listed)

Operating Parameters

- Temperature: 0 to 60°C
- Humidity: Up to 90% (non-condensing)

Physical

- Size: 6.44 x 4.06 x 1.44 in (16.35 x 10.32 x 3.65 cm)
- Weight: 16 oz (453.6 g)

Compliance

- FCC, ROHS, CE Marked, ANSI

Rack mountable with RM4

The **NTP100-TC** is an NTP time server that synchronizes to a time code source and converts the signal to Network Time Protocol. It automatically detects the incoming time code source; long-term accuracy is the same as the external source. With loss of time code, the device will revert to an internal oscillator with accuracy of better than 165 msec/day.

Features

- Compact NTP client / server
- Synchronize to existing IRIG or SMPTE time code source
- NTP output accuracy of ± 2 milliseconds
- Differential or single-ended time code input
- 6-digit clock display (red)
- Adjustable time display brightness

Specifications

Time Code Inputs

- IRIG-B0 (DCLS), IRIG-B1 (AM), IRIG-A0 (DCLS), IRIG-A1 (AM), IRIG-E0 (DCLS), IRIG-E1 (AM), SMPTE 12M, 309M, 24/25/30 fps and 29.97 drop frame

Holdover Accuracy

- With loss of power, device reverts to an internal precision TCXO temperature-compensated crystal oscillator with accuracy of ± 1min/year or <165ms per day
- High-stability option with OXCO provides typical stability of 1 ppb/day (± 250ms/year) after 30 days of aging

Network Compatibility

- Supports NTP, DHCPv4, DHCPv6 for automatic acquisition of network address, name servers, and timeserver configuration
- Telnet/SSH communication
- IPv4/IPv6 compatible
- SNMP with custom MIB

Configuration

- Configure devices through provided WinDiscovery software or Telnet
- Configuration is saved to nonvolatile memory and survives power losses
- Authenticated network messages prevent unauthorized tampering of clock configuration

Connectors

- RJ45 - 10/100MB Ethernet
- DC input - 2.1 mm male jack
- 3-pin terminal block (differential time code input)
- BNC (single-ended time code input)
- USB for configuration

Power

- DC input (9-28 VDC)
- Power consumption: < 7.5W
- Includes external 24 VDC wall-mount power supply with locking DC plug (UL and CE listed)

Operating Parameters

- Temperature: 0 to 60°C
- Humidity: Up to 90% (non-condensing)

Physical

- Size: 6.44 x 4.06 x 1.44 in (16.35 x 10.32 x 3.65 cm)
- Weight: 16 oz (453.6 g)

Compliance

- FCC, ROHS, CE Marked, ANSI

Rack mountable with RM4

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MADE IN THE USA

The **NTP100-OSC** NTP time server synchronizes to a TCXO (temperature-compensated internal oscillator) and sends NTP reference signals to NTP devices via Ethernet, maintaining an accuracy of ± 1min/year or < 165ms per day. An optional OCXO increases stability to ± 250ms/year.

Features

- Compact NTP client / server
- Internal precision TCXO accurate of ± 1 min/year
- Optional OCXO accurate of ± 250ms/year
- NTP output accuracy of ± 2 milliseconds
- 6-digit clock display (red)
- Adjustable time display brightness

Specifications

Holdover Accuracy

- Internal precision TCXO temperature-compensated crystal oscillator provides accuracy of ± 1min/year or < 165 ms/day
- High-stability option with OCXO provides typical stability of 1 ppb/day (± 250ms/year) after 30 days of aging

Network Compatibility

- Supports NTP, DHCPv4, DHCPv6 for automatic acquisition of network address, name servers, and timeserver configuration
- Telnet/SSH communication
- IPv4/IPv6 compatible
- SNMP with custom MIB

Configuration

- Configure devices through provided WinDiscovery software or Telnet/SSH
- Configuration is saved to nonvolatile memory and survives power losses
- Authenticated network messages prevent unauthorized tampering of clock configuration

Connectors

- RJ45 - 10/100MB Ethernet
- DC input - 2.1mm male jack
- RS-232 - 9 pin male
- USB for configuration

Power

- DC input (9-28 VDC)
- Power consumption: < 7.5W
- Includes external 24 VDC wall-mount power supply with locking DC plug (UL and CE listed)

Operating Parameters

- Temperature: 0 to 60°C
- Humidity: Up to 90% (non-condensing)

Physical

- Size: 6.44 x 4.06 x 1.44 in (16.35 x 10.32 x 3.65 cm)
- Weight: 16 oz (453.6 g)

Compliance

- FCC, ROHS, CE Marked, ANSI

Rack mountable with RM4

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