CT7300

High Precision Time Synchronization Server

Description

CT7300 is a high-performance and high-precision integrated time system with IEEE 1588. The device has abundant output interface, small transmission error, simple installation, and can work continuously in harsh environment such as engine room, vehicle, etc. It can be widely used in application of time fields.

By receiving GNSS signal or IRIG-B signals, high-precision time and frequency signals are generated locally, CT7300 support high-precision PTP, NTP, PPS, 10MHz, IRIG-B (DC) and TOD signals output.

The CT7300 supports various profiles of IEEE 1588, such as Ethernet default, itu-g8275-1, IPv6, IPv4, itu-g8275-2, itu-g8265-1, hybrid, telecom-2008. In the case of losing the signal source, the system can also maintain the time output of 500 ns accuracy within 24 hours.

Product View

CT7300 Front View

CT7300 Rear View

Key Features

- Standard 19-inch,1U design;
- Multi-mode receiver (Glonass, GNSS, GNSSS and Galileo)；
- Multiple types of time and frequency output;
- Dual power support, AC or DC.
- High performance OCXO configuration(Optional Rubidium);
- PTP supports 1000 clients (128 packages per second) per port.

Network Protocols

- IEEE1588v2
- HTTPS
- IPv4/IPv6
- FTP / SFTP
- SYSLOG
- SSH/SCP

Security

- Configuration settings backup and restore;
- High level of security: HTTPS, SSHv2;
- Supervision possible via syslog;
- Field upgrades via SFTP;
- Support Radius and TACAS+.

Input

- Up to 2 x GNSS/GNSS input(SMA)
- 1 x IRIG-B（DC）input
- 1 x IRIG-B（DC） input (fiber ST)
- 1 x 10Mhz input (SMA)
- 1 x 1PPS input (TNC)
- 1x PPS/TOD/IRIG-B （DC）input（DB9）

Output

- 1 x NTP output（RJ45）
- 2 x PTP output （SFP）
- 4 x 10Mhz output （SMA）
- 1 x IRIG-B（DC） output
- 1 x IRIG-B（DC） output (fiber ST)
- 1x PPS/TOD/IRIG-B （DC）output（DB9）

Accuracy

Timing Accuracy:

- - 1PPS: ≤50ns(Locked with GNSS)
- - PTP: ≤50ns
- - NTP: ≤1.5ms

Holdover Accuracy:

- - OCXO Version: ≤20us(24h)
- - Rubidium Version: ≤500ns(24h)

GNSS Receiver Features

- GNSS satellites status
- Configurable SNR, Elevation
- User-configurable antenna cable delay compensation
- Voltage to antenna +3~5VDC
- Antenna connector SMA-F (50ohm)
- Multi -band, Multi-constellation 128-channel GNSS receiver
- GNSS (L1C/A L2C), GNSSS (B1I, B2I) two concurrent GNSS constellations

Environmental

- Dimensions:
  440×240×43.5mm(19 inch;1U)
- Operating temperature (ambient): -20 ~ +55℃
- Storage temperature:-40~+80℃
- Humidity: 0 ~ 95% (without condensation)

Power Supply

- AC Power: 110~240V AC (47 ~ 63Hz)
- DC Power:-48V
- Power consumption: less than 25W

WEB System

The WEB system of CT7300 support:

- Device Overview: You can see all the basic information of connected devices;
- Device Function: You can configure all ports of connected devices;
- Alarm: You can view and manage all alarms of connected devices;
- Log: You can view and check logs of connected devices;
- Device Backup: You can reboot and backup firmware of connected devices.