ptf 5103A

Precise Time and Frequency, LLC

"TymeMaster"

IEEE 1588 - v2

PTP Grand Master

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Tymemaster ptf 5103A
IEEE 1588-v2 Grandmaster Clock

Features

- **Stratum 1 Reference Clock with GNSS**
- **Increased Precision Hardware Time Stamping**
- **Multiple Constellations**
  - **GPS, Galileo, Glonass, QZSS**
  - **IRNSS/NavIC, SBAS, Beidou**
- **Alternate Inputs**
  - **1PPS, 10MHz, Time Code**
- **4xRJ45 PTP and 1xPTP Gigabit Ports**
- **Management Ports**
  - **1xRJ45 Remote Monitor/Control**
  - **1xUSB Console Port**
- **Signal Outputs**
  - **10MHz, 1PPS**
- **Redundant Power**
  - **DC or AC options**
- **Status Display**
  - **Vacuum Fluorescent, Front Panel**
- **Multiple Profiles Available as Standard**
  - **Default, Telecom, Power, SMPTE**
  - **Others optional**
- **High Quality Internal OCXO**
  - **Provides exceptional stability**
  - **Extended holdover capability**

Description

The ptf 5103A TymeMaster provides a fully IEEE 1588-2008 PTP v2 compliant Grandmaster Clock.

In Master mode ptf 5103A is able to synchronize one step clocks and two-step clocks, provides management messages (TLV) and includes a variety of pre-loaded profiles available for user selection.

Offering either AC or DC input power (or optionally both) the ptf 5103A is the product of choice when the requirement exists for simple, yet precise transmission of time and frequency is required.

In Boundary Clock mode the ptf 3300A give unprecedented performance with the possibility of unlimited fan-out for large networks.

The performance of TymeMaster benefits from the decades of time and frequency experience of the Precise Time and Frequency team and delivers the latest advances in technology in a user-oriented package.

Specifications

Inputs

GNSS Input – L1 / L5

- GPS, Galileo, Glonass, Beidou
- QZSS, IRNSS, SBAS

Other External Inputs

- 1PPS, 10MHz, E1, T1, TOD

Outputs

- 10MHz CMOS Square Wave
- 1PPS

Connectivity

- 5 x RJ45 Ethernet Jacks
  - 10BASE-Te/100BASE-TX/1000BASE-T
- Duplex Optical LC connected to SFP transceiver receptacle
- USB Console Port

Accuracy (Locked to GNS)

- 10MHz <5E -12(24hr average)
- 1PPS <30ns rms
- Clock <100ns

Holdover (1 day)

- 10MHz
  - OCXO <5E-10 (24hr)
  - Rubidium <5E-12 (24hr)
- 1PPS / Clock
  - OCXO <10 microseconds (24hr)
  - Rubidium <1 microsecond (24hr)

Power

- Dual Redundant AC 100VACV to 240VAC

OR

- Dual Redundant DC 18V to 72V

OR

- One AC and one DC input

Physical

Dimensions (in inches)

- 19 wide x 16 deep x 1U (1.75) High

Environmental

- Operating temperature 0 to 50 deg
- Operating humidity 90% non-condensing

ISO 9001-2015

CE

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Specifications subject to change without notice
rev A