



PolyNet PMD101

PTP Monitoring Device



Key Features

- PMD101 is a lightweight, yet feature rich and versatile monitoring device for PTP synchronous networks
- Connecting to PTP master clocks it collects, measures and evaluates synchronization performance data
- PMD101 acts as a PTP slave and can connect up to 64 masters at the same time
- It measures the synchronous performance of one selected clock using external reference

PolyNet PMD101 Technical Data

Network Protocols

- IEEE1588-2008 Precision Time Protocol
- IPv4 unicast or multicast
- Layer2 multicast
- VLAN and MAC-VLAN support
- WebSocket interface to NMS
- JSON formatted monitoring data

PTP capabilities

- IEEE1588-2008 V2 Default profile
- Slave clock function
- Up to 64 PTP master clocks can be monitored
- Tracking quality messages of masters
- Measuring timing quality of selected master

Remote Monitoring Master Clocks

- ClockClasses
- ClockAccuracy
- ClockVariance
- TimeSource
- StepsRemoved

Measurement

- Measuring timing quality arriving from the selected master
- Reference from regenerated internal or external sources
- Provides TE, MTIE, TDEV, PDV statistics

Ethernet connection

- Shared physical port using MAC-VLAN
- Management interface
 - Measuring interface
 - on single RJ45 connector

Inputs

- External references for measurement
- 1 PPS input
 - 10 MHz input

Outputs

- Locked to selected master
- 1 PPS output
 - 10 MHz output

Management

- Command line interface using
- USB serial local craft terminal
 - SSH protocol for remote management
 - Context sensitive help
 - Tab completion for commands

Weight, dimensions and power

- 0.6 kg
- Width: 130 mm
- Height: 40 mm
- Length: 220 mm
- -48VDC ETSI EN 300 132-2
- Power consumption: max. 10 W

Environmental ranges

- Temperature: -5...+45 C
- Relative humidity: 5%...90%