

■ PolyNet PTPEM1009 Edge Master Clock



Precision Time Protocol Edge Master Clock, fully compliant with IEEE1588-2008 Standard

■ Network Protocols

IEEE1588-2008 Precision Time Protocol (V2)
ESMC for SyncE quality messaging
IPv4, IPv6, Native Ethernet,
VLAN support (802.1Q VLAN trunking)
SNMP V2c support

■ Server Precision

PRTC-A, PRTC-B
(one-step, hardware timestamps)

■ PTP capabilities

Supported profiles:

IEEE1588-2008 V2 Default profile
Telecom Frequency: ITU-T G.8265.1
Telecom Time: ITU-T G.8275.1, ITU-T G.8275.2
Unicast, Multicast and Hybrid modes are supported
Hardware Timestamp Engine
PTP clock quality messaging
(Priorities, ClockClasses, ClockAccuracy, Variance)
Delay request-response and peer delay mechanisms (E2E, P2P)
Support for boundary clocks
VLAN support on every PTP interface

■ PTP parameters

Sync rate: up to 256 Hz
Number of slaves: up to 64 clients at full rate
(256 sync, 256 delay request reply and 256 announce packets per second)

■ Synchronous Ethernet parameters

SyncE capabilities on every SFP port
ESMC levels conforming to all stratum and ITU quality levels
Compliant to the relevant sections of ITU-T G.8261/ G.8262/G.8264

■ Ethernet connection

Server ports: 2 x SFP 1G optical and/or electrical
Management port: 10/100/1000 Mbit/s, RJ45 connector

■ Inputs

Multiband GNSS receiver
GNSS antenna: SMA connector – Support for 2 Bands GPS, Galileo, Glonass, QZSS, Beidou satellite systems
SBAS supported
1 x Clk In (2 or 10 MHz) 1.0/2.3 connector

■ Outputs

1 x 1PPS 1.0/2.3 connector
1 x 10MHz 1.0/2.3 connector

■ Management

CLI – through serial or SSH connection
ClockView NMS software
User levels and privileges
Local log files and error indications

■ Weight, dimensions and power

3.1 kg
19 inch 1U rack size (428 x 225 x 43.5 mm)
-48VDC redundant (ETSI EN 300 132-2)
Power consumption: 25 W

■ Environmental ranges

Operating temperature range: -5...+45 C
Relative humidity: 5%...90%
ETSI EN 300 019-1-3 Class 3.1E

■ Oscillator selection

OCXO
Holdover performance
OCXO oscillator: 4µs/day