

■ PolyNet PTPGM1010 IEEE 1588V2 Grandmaster Clock



Precision Time Protocol Grandmaster Clock, fully compliant with IEEE1588-2008 Standard and compatible with PW1008HG Primary Reference Clock

■ NETWORK PROTOCOLS

IEEE1588-2008 Precision Time Protocol (V2)
ESMC for SyncE quality messaging
IP, Native Ethernet, VLAN support

■ SERVER PRECISION

20ns rms typical
(one-step, hardware timestamps)

■ PTP capabilities

Supported profiles:
IEEE1588V2 Default
ITU-T G.8265.1
ITU-T G.8275.1
ITU-T G.8275.2
Unicast and Multicast modes are supported
Hardware Timestamp Engine
PTP clock quality messaging
(Priorities, ClockClasses, ClockAccuracy, Variance)
Delay request-response and peer delay mechanisms
(E2E, P2P)

■ PTP parameters

Sync rate: up to 128 Hz
Number of slaves: up to 2 x 1000 clients at full rate

■ Synchronous Ethernet parameters

SyncE capabilities on every SFP port
ESMC levels conforming to all stratum
and ITU quality levels

■ NTP Server capabilities

Hardware Time-stamp Stratum 1 NTP engine
NTPv1 ... NTPv4 protocol support
MD5 authentication support

■ Ethernet connection

Server ports: 4 x SFP 1G optical and/or electrical
Management port: 10/100/1000 Mbit/s RJ45
Ethernet

■ Inputs

GNSS antenna: SMA connector – Support for GPS,
Galileo, Glonass, QZSS, Beidou satellite systems
1 x 1PPS: 1.0/2.3 connector
1 x 2MHz: 1.0/2.3 connector
NMEA: RJ12 serial connector - compatible
with PW1008HG PRC

■ Outputs

2 x 1PPS + ToD RJ45
4 x 2MHz and 4 x E1 (2Mbps) 1.0/2.3 connector

■ Management

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

■ Weight, dimensions and power

3.2 kg
19 inch 1U rack size (428 x 225 x 43.5 mm)
-48VDC redundant

■ Environmental ranges

Operating temperature range: -5...+45 C
Relative humidity: 5%...90%

■ Oscillator selection

OCXO or Rubidium