



Meinberg Radio Clocks

Lange Wand 9
31812 Bad Pyrmont, Germany
Phone: +49 (5281) 9309-0
Fax: +49 (5281) 9309-30
<https://www.meinbergglobal.com>
info@meinberg.de

IMS-PSX210: Powerful PTP Module for Modern Bandwidth Requirements

This product is only compatible with Meinberg's line of modular **IMS LANTIME** systems.

Visit the [1][IMS Information Page](#) to learn more.

The IMS-PSX210 module for Meinberg's IMS family of modular time servers is a powerful IEEE1588 PTP solution designed to integrate seamlessly into 10 Gigabit networks conventionally found in high-bandwidth environments such as data centers, broadcasting & media production, telecom and financial networks.

Key Features

- Fully IEEE1588-2008 compliant module for PTP infrastructure with PTPv2.0 support
- Ease of configuration through Web Interface of base IMS unit
- Data Link Layer: Layer 2 / Layer 3 / E2E / P2P
- 1-Step or 2-Step Master/Slave operation
- 10 Gigabit connectivity for seamless integration into 10G networks
- Two discrete physical interfaces allowing a single module to serve two separate subnets with different PTP instances
- Support for a full range of IEEE1588-2008 profiles used in a variety of industries, including profile-specific extensions
- 2 SMA Outputs for TTL Signals (1PPS, 10 MHz, 2048 kHz)

Description

With full support for the IEEE1588 PTP protocol and an extensive range of PTPv2 profiles, the IMS-PSX210 is flawlessly adaptable to any PTP application, operable as a powerful PTP grandmaster drawing accurate time directly from an authoritative source such as GNSS, as a boundary clock for re-distributing time with minimal offsets to downstream devices, or as a bridge device enabling interoperability between discrete PTP networks.

10G Dual Network InterfacesThe IMS-PSX210 features two discrete 10 Gigabit (10GBASE) physical interfaces that allow the module to be connected to two separate subnets and operate as separate clocks with separate configurations in both. The 10GBASE support allows the server to be seamlessly integrated into a 10 Gigabit network without the need for an intermediate switch or router, eliminating an unnecessary PTP hop and potentially increasing the clock accuracy accordingly.

Characteristics

Supported PTP Profiles

Custom Profile

Default:

- * Default E2E IEEE1588-2008
- * Default P2P IEEE1588-2008

Power:

- * Utility IEC 61850-9-3 Power Profile
- * IEEE C.37.238-2011 Power Profile
- * IEEE C.37.238-2017 Power Profile

Telecom:

- * ITU-T G.8265.1 Telecom Frequency Profile
- * ITU-T G.8275.1 Telecom Phase

Operating Mode

- * PTP V2

1588 Clock Mode	1-Step or 2-Step Master/Slave operation
PTP Modes	Multicast/Unicast Layer 2 (IEEE 802.3) Multicast/Unicast Layer 3 (UDP IPv4/IPv6) Hybrid Mode E2E / P2P Delay Mechanism Up to 128 messages/second per client
Network Protocols	IPv4, IPv6 DHCP, DHCPv6 DSCP IEEE 802.1q VLAN filtering/tagging IEEE 802.1p QOS
Available Network Connectors	2x SFP+ Link Speed 10 Gbit (10GBASE)
Board Dimensions	Euro Card, 160 mm x 100 mm 8HP width (with heat sink plus fan), occupies two IMS slots <i>This is in reference to its use of two 'slots' of chassis space due to the higher profile of the module resulting from the size of the components on the printed circuit board and the need to provide reliable thermal management.</i>
Supported Models	Can be used in all [1] IMS LANTIME models (MRI, ESI or IO slot).
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	5 to 95 % (non-condensing) at 40 °C (104 °F)
Warranty	Three-year warranty
RoHS Status of Product	This product is fully RoHS-compliant.
WEEE Status of Product	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

There is no online manual available for this product.: [2][Contact us](#)

Links:

[1] <https://www.meinbergglobal.com/english/products/modular-sync-system.htm>

[2] <mailto:info@meinberg.de>