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microSyncRX: Powerful IEEE 1588 PTP Grandmaster and NTP Server in a 19 inch Rackmount Enclosure

Meinberg's versatile synchronization solution with redundant power supply, a reliable and universal sync solution for a large range of different industries and applications.

Key Features

- Selectable Reference Time Sources: GPS: Satellite receiver for the Global Positioning System GNS: Combined GPS/GLONASS/Galileo/BeiDou satellite receiver (L1 frequency band), can also be used for mobile applications GNS-UC: GPS and Galileo Satellite Receiver with Up-Converter for Meinberg GPS Antenna/Converter
- High-performance (S)NTP server
- Meinberg Device Manager for configuration and status monitoring
- IEEE 1588 PTP time server incl. IEC/IEEE 61850-9-3 & IEEE C.37.238
- Redundant power supply with AC or DC voltage
- Different oscillator options for advanced holdover performance
- All microSync models offer a wide range of multiple output signals, allowing synchronization of both network devices such as NTP clients and PTP slaves as well as directly attached synchronization clients with other electrical and optical signals.

Description

Meinberg's microSyncRX is a feature-rich synchronization devices, offering a high level of efficiency and versatility and impresses with high port density and optional redundant power supplies.

Providing two IEEE 1588 ports, the microSyncRX models are powerful GNSS synchronized PTP Grandmasters offering a high level of accuracy and supporting all major PTP profiles: Default, Power, Telecom (Frequency and Phase profiles), SMPTE, AES67/RAVENNA or IEEE 802.1AS profile.

All microSyncRX variants offer key features like multiple programmable output signals (two over fiber optical ST connectors), four Gigabit Ethernet interfaces and the ability to synchronize both NTP and PTP devices.

The sheer diversity of outputs and interfaces allows the microSyncRX to be deployed in a large range of industries and applications. Depending on industry requirements customers can choose from different variants to best suit their needs.

The variants are defined via the BNC connectors which can provide several I/O options.

The 100-series offers pre-configured outputs like Programmable Pulses (TTL), Time Code AM (IRIG, AFNOR) and Frequency Synthesizer (0,1 Hz to 10 MHz).

Datasheet microSyncRX 100-Series (PDF)

The 300-series with pre-configured I/Os like PPS input (TTL), 10 MHz input (sine/TTL), 10 MHz output (TTL) and 10 MHz output (sine).

Datasheet microSyncRX 300-Series (PDF)

Characteristics

Supported PTP Profiles	**Default:** - IEEE 1588v2 (PTPv2) **Power:** - IEC/IEEE 61850-9-3 - IEEE C37.238-2011 - IEEE C37.238-2017 **Telecom:** - ITU-T G.8265.1 Frequency - ITU-T G.8275.1 Phase/Time - ITU-T G.8275.2 Phase/Time - DOCSIS 3.1 **Broadcast:** - SMPTE ST 2059-2 - AES67 Media Profile **AVB/TSN:** - IEEE 802.1AS
Network Protocols	IPv4, IPv6 NTPv3, NTPv4 PTPv2 IEC 62439-3 (PRP) DHCP, DHCPv6 DSCP IEEE 802.1q VLAN filtering/tagging IEEE 802.1p QOS SNMPv1/v2/v3 Remote Syslog Support (UDP)
Optical Outputs	2 x Programmable pulse outputs, fiber optic - ST connectors
Interface	Single serial RS-232 interface
Network Interface	**Combo Port:** 4 x GBIT SFP - Slot 10/100/1000Mbit, RJ45 or 1000FX
Universal Serial Bus (USB) Ports	**USB Terminal** USB-to-serial console - Micro-USB Type B **USB Host** USB connector management CPU - USB Type A
BNC Connectors	4 x BNC female connectors for different output signals - e.g. programmable pulses, frequency synthesizer, timecode AM

Terminal Connector	**16pin DMC X1** programmable pulses Error/Relay **16pin DMC X2** programmable pulse (TTL, isolated) programmable pulse (RS-422) Time Code DCLS (TTL, isolated)
Oscillator Options	OCXO SQ Holdover performance 1 day: ± 220
Power supply	AC / DC: 90-265 V AC, 47-63 Hz / 90-250 V DC DC: 20
Power consumption	Pmax = 30W
Atmospheric Pressure	615 to 1600 hPa
Operating Altitude	Up to 4000 m (13,123 ft) above sea level
Form Factor	Housing Type: 19", 1HE 482,6 mm x 248 mm x 43 mm /19 inch x 9.76 inch x 1.69 inch (widthx depth x height) Material: Steel
Protection	IP30
Ambient temperature	- 20 °C to + 55 °C (operation)
Storage Temperature	
Humidity	5 % to 95 %, 40 °C, non-condensing
Compliances	

* CB Scheme

* CE

* FCC

* UL

* CSA

* WEEE, Waste of Electrical and Electronic Equipment

* RoHS, Restriction of Hazardous Substances

* REACH, Registration, Evaluation, Authorization and Restriction of Chemicals

Scope of supply	Included in delivery is an outdoor antenna incl. mounting kit, pre-assembled antenna cable and product documentation on USB storage.
Warranty	Three-Year Warranty
RoHS-Status of the product	This product is fully RoHS compliant
WEEE status of the product	This product is handled as a B2B category product. In order to secure a WEEE compliant waste disposal it has to be returned to the manufacturer. Any transportation expenses for returning this product (at its end of life) have to be incurred by the end user, whereas Meinberg will bear the costs for the waste disposal itself.

Manual

The english manual is available as a PDF file: [1]Download (PDF)

Links:

[1] https://www.meinbergglobal.com/download/docs/manuals/english/microsync_rx101sq_rc.pdf