



Meinberg Radio Clocks

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

[1]

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

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.

Key Features

- Selectable Reference Time Sources: GPS: Satellite receiver for the Global Positioning System - Recommended for fixed-site applications GNS: Combined GPS/GLONASS/Galileo/BeiDou satellite receiver - Recommended for both fixed-site and mobile applications GNS-UC: GPS and Galileo Satellite Receiver with Up-Converter for Meinberg GPS Antenna / Converter - Recommended for both fixed-site and mobile applications
- High Performance NTP Server (NTP & SNTP v2, v3, v4)
- 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
- Option: OLED display with rotary knob for initial setup
- 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

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.

For further information, please check out our datasheet:

[Datasheet microSyncRX 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

Synchronous Ethernet

Master and Slave Capability
Compliant to ITU-T G.8261, G.8262 and G.8264
Ethernet Synchronization Messaging Channel (ESMC)

Display**OLED display option****Functions** (system administration):

- * IP address
- * Subnet
- * Gateway
- * DHCP

Indication:

- * Time and date
- * Status of synchronization source:
- * Firmware version
- * Model and serial number

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**Gigabit Ethernet (GbE) - SFP:**

LAN 0, LAN 1
Management
10/100/1000Mbit RJ45 or 1000FX
NTP

LAN 2, LAN 3
Management
10/100/1000Mbit RJ45 or 1000FX
NTP / PTP

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: $\pm 220 \text{ E-6 sec}$ 1 year: $\pm 4.7 \text{ sec}$ OCXO MQ Holdover performance 1 day: $\pm 65 \text{ E-6 sec}$ 1 year: $\pm 1.6 \text{ sec}$ OCXO HQ Holdover performance 1 day: $\pm 22 \text{ E-6 sec}$ 1 year: $\pm 788 \text{ E-3 sec}$ OCXO DHQ Holdover performance 1 day: $\pm 4.5 \text{ E-6 sec}$ 1 year: $\pm 158 \text{ E-3 sec}$
Power Consumption	$P_{\text{max}} = 30\text{W}$
Operating Voltage	Maximum voltage range: AC / DC: 90-265 V AC, 47-63 Hz / 90-250 V DC DC: 20
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 (width x depth x height) Material: Steel
Atmospheric Pressure	615 to 1600 hPa

Operating Altitude	Up to 4000 m (13,123 ft) above sea level
Protection	IP30
Supported Temperature	-20 °C to 55 °C (-4 °F to 131 °F) (operation)
Storage Temperature	-30 °C to 70 °C (-22 °F to 158 °F)
Supported 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

Contents of Shipment	Included in delivery is an outdoor antenna incl. mounting kit and pre-assembled antenna cable.
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/>

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