



MRTC

Master Router/Real Time Clock

Simplify Remote Production: Integrated timecode generation, secure routing, and low-latency media transport.

MRTC is a cost-effective device designed to replace local PTP/SNTP time sources (PTP Grand Masters), traditional ISP routers and media gateways in remote IP production. It generates local PTP/NTP timecode at each site via GNSS and cellular networks, eliminating the need for centralized grand master clocks.



Integrated PTP/NTP Timecode Generation



Secure VPN & Multipath Support



Low-Latency Media Transport



Built-in ISP Routing & Firewall



RIST Protocol for Reliable Transport



Seamless Integration for Remote Production

BRIEF

MRTC is a secure media router designed to simplify remote production. It provides low-latency media transport over unreliable networks using the RIST protocol and includes built-in ISP routing, firewalling, tunneling, and multi-path support. With its ability to replace traditional routers and synchronize time using GNSS or cellular networks, MRTC is the ideal solution for live broadcasting and REMI workflows.

SPECIFICATIONS

Integrated Timing and Secure Media Routing

- Local PTP/NTP synchronization: Acts as a local time source, replacing the need for centralized PTP Grand Masters.
- GNSS/PNT Satellite and 5G-NR/LTE cellular support: For retrieving accurate timecode worldwide and creating local PTP/NTP.
- Secure media transport with RIST protocol: Ensures low-latency, error-corrective transport over unreliable networks.
- ISP router with VPN and multi-path support: Functions as a full router with multi-ISP capability, firewalling, tunneling, and port mapping.
- Simplified remote production: Eliminates complex synchronization and reduces latency for live IP media workflows. Supports up to 500Mbps total throughput with up to 10 RIST destinations per tunnel (separate or bonded).
- Stratum-1 time server with a GNSS accuracy of 100ns and a unique automatic fallback to Cellular while still maintaining a long term accuracy of 15 us.
- Fully compliant IEEE 1588 PTP, SNTP and NTP network outputs on multiple independent ethernet ports.
- Supports all GNSS/PNT constellations: GNSS / GALILEO / BEIDOU / GLONASS / SBAS / QZSS and global SIMs making it ready for word-wide use.
- Compact, standalone device: Designed for easy deployment and quick setup in remote production environments.
- Supports common IP transmission formats and protocols: RIST, SRT, UDP, RTP, RTMP, WHIP and WHEP.
- Compatible with a wide range of IP media workflows.

Physical

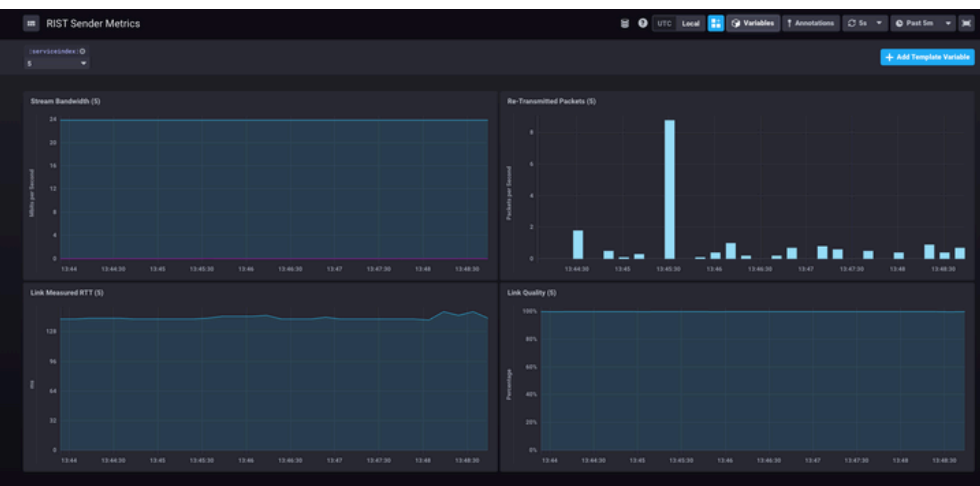
- +12VDC supply (Included)
- 3 x 2.5 GBE RJ-45 Network Interfaces
- 3 x HDMI Output
- Robust form factor for deployment anywhere
- Dimensions: 6.7 x 5.5 x 2.3" (170 x 140 x 58mm)
- 1.1kg

FOR MORE PRODUCT INFORMATION
PLEASE CONTACT OUR SALES TEAM

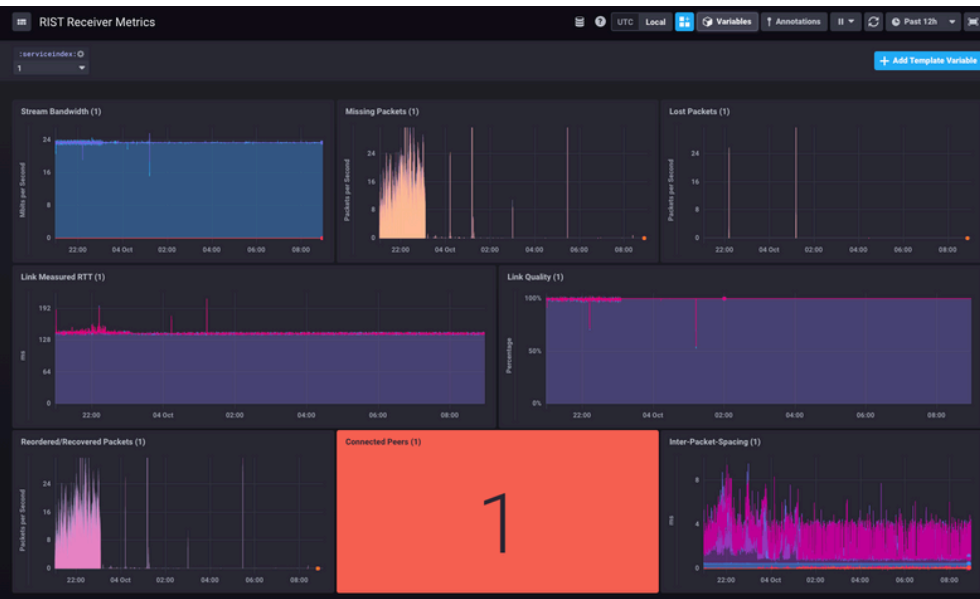
www.sipradius.com

+1-954-507-0693

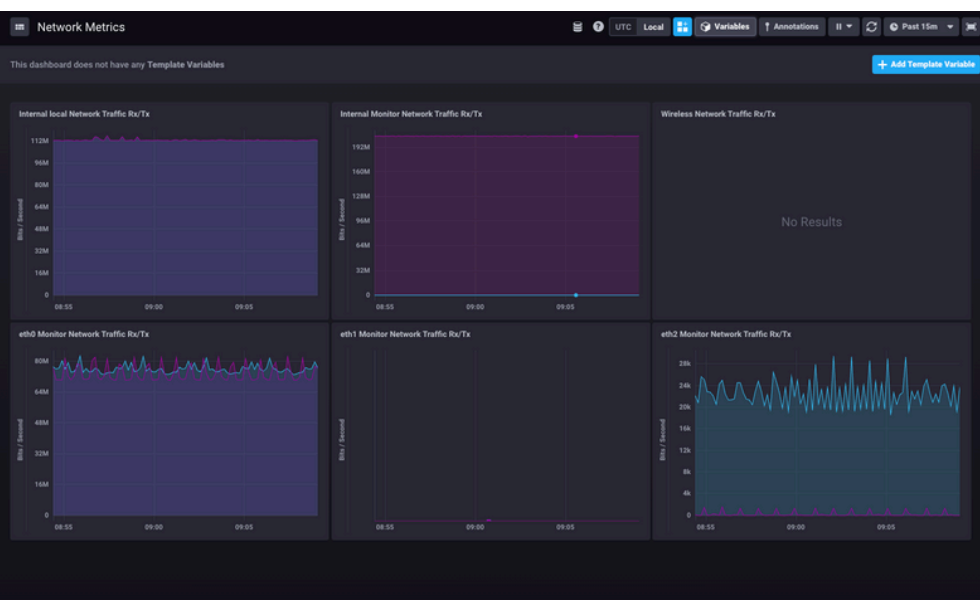
sales@sipradius.com
sales-america@sipradius.com
sales-apac@sipradius.com
sales-emea@sipradius.com



01 Real-time stats for the RIST Transmitter instance showing bandwidth, measured RTT, link quality and retransmitted packet count.



02 Real-time stats for the RIST Receiver showing bandwidth, measured RTT and Inter-packet-spacing, link quality and missing/ recovered/ lost packet count.



03 Real-time stats on all network cards in the system showing transmitted and received bandwidth for each.

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■ www.sipradius.com

■ +1-954-507-0693

■ sales@sipradius.com
 ■ sales-america@sipradius.com
 ■ sales-apac@sipradius.com
 ■ sales-emea@sipradius.com

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