

RS-1000G-M12

10 Port M12 Industrial Managed Gigabit Ethernet Router



- Compliant with EN50155
- 10x 10/100/1000T(x) M12 connector
- Support Bypass function for non-stop communication even when no power exists on port 9 and port 10
- Built for harsh environments and wide temperature range application
- TTDP embedded software, automatically configure train consists
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/v3, up to 512 groups
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection
- Supports industrial automation protocols Ethernet/IP and Modbus TCP

Specifications

Technology

- IEEE 802.3 10BaseT
- IEEE 802.3u 100BaseTX
- IEEE 802.3ab 1000BaseT
- IEEE 802.3x Flow Control
- IEEE 802.3az Energy-Efficient Ethernet
- IEEE 802.3ad/802.1AX LACP
- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1w Rapid STP
- IEEE 802.1s Multiple STP
- ITU-T G.8032 / Y.1344 ERPS
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1ad Stacked VLANs
- IEEE 802.1p Class of Service
- IEEE 802.1X Network Authentication
- IEEE 802.1AB LLDP
- IEEE 1588 PTP

Standards

Processing Type Store and Forward

Switch Properties

Switch Fabric 20Gbps

Priority Queues 8 Queues

Jumbo Frame 9216bytes

MAC Table Size 16K

Packet Buffer 12Mbits

VLAN Table Size 4094

IGMP Group 512

ACL Group 512

Router Forwarding Rate 5Mbits

Software Feature

Network Redundancy RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP

Security 802.1X, RADIUS, TACACS+, SSL, SSH

Management IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP

Diagnostics RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP

Configuration DHCP Server/Client, Relay Option 82, TFTP

Filter 802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning

Time Sync. NTP, IEEE1588v2 OC (Software Timestamp), BC (Software Timestamp), TC (Hardware Timestamp)

QoS CoS, DSCP, WRR/SPQ Queuing, Storm Protection

Industrial Profiles Ethernet/IP, Modbus TCP, Profinet, TTDP

L3 Routing NAT

Interface

| | |
|--------------------------|--|
| Network Connector | 10x 10/100/1000T(x) M12 Female X-coded 8-pole, auto negotiation speed duplex mode, auto MDI/MDI-X |
| LED Indicators | Per unit: PWR1, PWR2, Status Ports: Link/Active with highest speed(Green), low speed(Amber) |
| Alarm Contact | 1x relay output with current carrying capacity of 1A @ 24 VDC |
| Serial Console | 1x RS232 in M12 Male A-coded 5-pole connector with console cable, 115.2Kbps, 8N1 |

Power Requirements

| | |
|--------------------------|--|
| Operation Voltage | 24-48VDC, 72-110VDC, redundant dual inputs |
| Connection | M12 Male S-coded 4-pole |
| Power Consumption | 15W |
| Protection | Overload Current Protected, Reverse Polarity Protected |

Mechanical Construction

| | |
|-------------------------|--|
| Enclosure | SECC |
| Protection Class | IP40/IP54(Optional) |
| Dimensions | 143x209x77 mm (WxHxD) |
| Weight | 1.20 kg |
| Mounting | Wall Mounting Kits, Optional DIN-Rail Mounting |

Environmental Limits

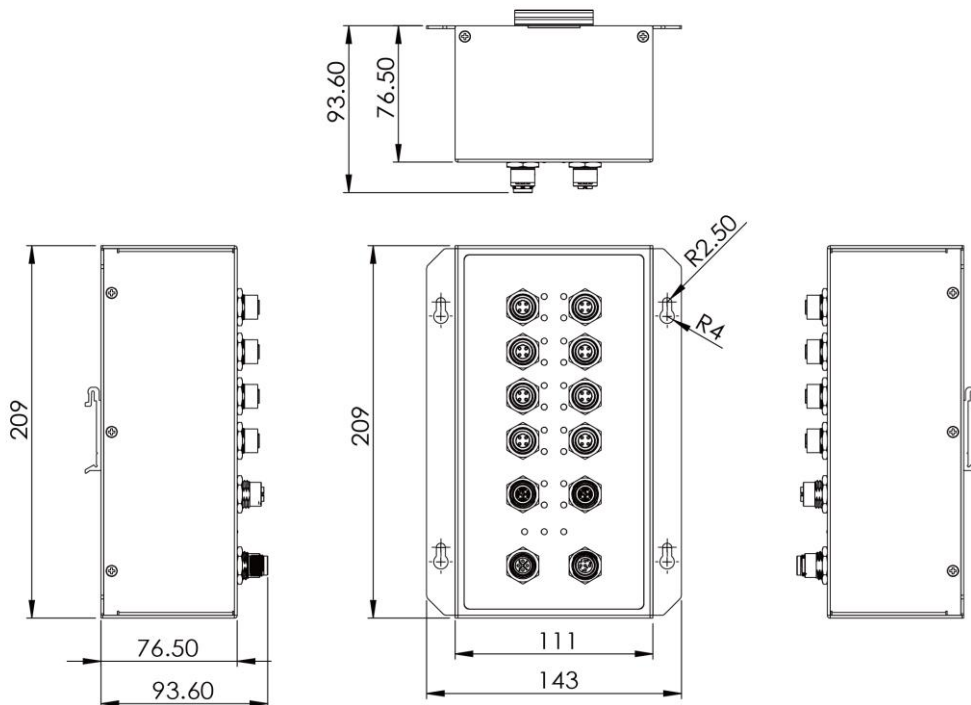
| | |
|----------------------------------|--|
| Operating Temperature | Extended: -40°C ~ 75°C (-40°F ~ 167°F) |
| Storage Temperature | -40°C ~ 85°C (-40°F ~ 185°F) |
| Ambient Relative Humidity | 5 to 95%, (Non-Condensing) |

Regulatory Approvals

| | |
|-----------------------|---|
| EMI | FCC Part 15 Subpart B Class A CE EN 55032 Class A |
| EMS | IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (Surge) IEC61000-4-6 (CS) IEC61000-4-8 (Magnetic Field) |
| Free Fall | IEC60068-2-32 |
| Shock | IEC61373 |
| Vibration | IEC61373 |
| Green | RoHS Compliant |
| Certifications | EN 50155 EN 45545-2 |
| MTBF | >100,000 hours |
| Warranty | 5 Years |

Features with star(*) implies those are under development.
In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.

Dimensions (unit = mm)



Ordering Information

RS-1000G-M12-LVU-T
10 Port M12 Industrial Managed Gigabit Ethernet Router
- 10x 10/100/1000T(x) M12 connector
- Power Input: 24-48VDC
- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
- Protection Class: IP40
- UL Compliant

RS-1000G-M12-LVU-WT
10 Port M12 Industrial Managed Gigabit Ethernet Router
- 10x 10/100/1000T(x) M12 connector
- Power Input: 24-48VDC
- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
- Protection Class: IP54
- UL Compliant

RS-1000G-M12-HVU-T
10 Port M12 Industrial Managed Gigabit Ethernet Router
- 10x 10/100/1000T(x) M12 connector
- Power Input: 72-110VDC
- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
- Protection Class: IP40
- UL Compliant

RS-1000G-M12-HVU-WT
10 Port M12 Industrial Managed Gigabit Ethernet Router
- 10x 10/100/1000T(x) M12 connector
- Power Input: 72-110VDC
- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
- Protection Class: IP54
- UL Compliant