

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

Standards	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
Standards	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

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	0.59A@24VDC; 0.15A@110VDC
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

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.

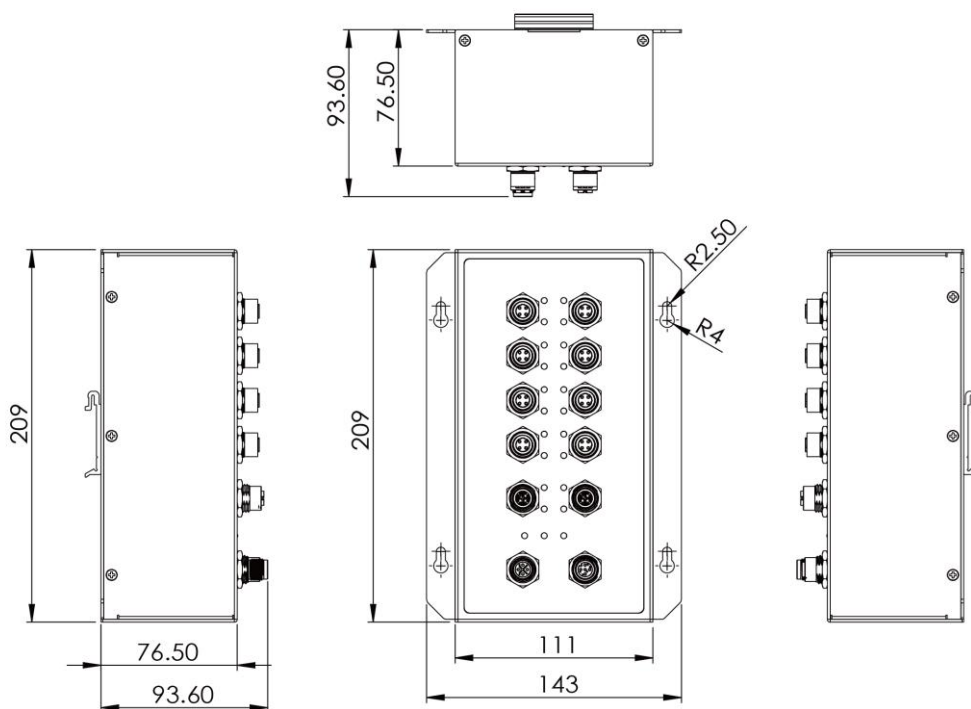
Environmental Limits

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

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
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
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
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