

IGS-R9812GP LAYER 3 DIN-RAIL ETHERNET SWITCH



ABOUT

The IGS-R9812GP supports Layer-3 routing for better network performance on large-scale LANs into multiple subnets to support long-haul and EMI immunity communications. The hardware Layer-3 switch is optimized to transmit data as fast as Layer-2 switches. With complete support of Ethernet Redundancy protocol, O-Ring and MSTP can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. And offers support wide operating temperature from -40°C to 75°C.

The IGS-R9812GP can also be managed centralized and convenient by Open-Vision, the Web-based interface, and Telnet and console (CLI) configuration. Therefore, this switch is one of the most reliable choices for highly-managed and Fiber Ethernet power substation with rolling stock application.

FEATURES

- Supports standard IEC 62439-2 MRP (Media Redundancy Protocol) function
- Supports IEEE 1588v2 clock Synchronization
- Supports IPV6 new internet protocol version
- Supports Modbus TCP protocol
- Provided HTTPS/SSH protocol to enhance network security
- Supports IEEE 802.3az Energy-Efficient Ethernet technology
- Supports SMTP client

Specifications

ORing Gigabit Switch Model	IGS-9812GP
Physical Ports	
10/100/1000Base-T(X) Ports in RJ45 Auto MDI/MDIX	8
100/1000Base-X SFP Port	12
Technology	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol)
Ethernet Standards	IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
MAC Table	8K
Priority	8
Processing	Store-and-Forward
Switching Properties	Switching latency : 7 μ s Switching bandwidth : 40Gbps Max. Number of Available VLANs : 256 IGMP multicast groups : 128 for each VLAN Port rate limiting: User Define Https / SSH enhance network security
Jumbo Frame	Up to 9.6K
Security Features	Device Binding security feature Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q) to segregate and secure network traffic Radius centralized password management SNMPv3 encrypted authentication and access security Https/SSH enhance networking security
Software Features	STP/RSTP/MSTP (IEEE 802.1w/s) Redundant Ring (O-Ring) with recovery time less than 30ms over 250 units TOS/Diffserv supported VLAN (802.1Q) with VLAN tagging Voice VLAN IGMP v2/v3 Snooping IP-based bandwidth management Application-based QoS management DOS/DDOS auto prevention Port configuration, status, statistics, monitoring, security DHCP Server/Client/Relay Modbus TCP
Network Redundancy	O-Ring Open-Ring O-Chian MRP MSTP (RSTP/STP compatible)
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 115200bps, 8, N, 1
LED Indicators	
Power Indicator	Green : Power LED x 2
R.M. Indicator	Green : Indicates that the system is operating in O-Ring Master mode
Ring Indicator	Green : Indicates that the system is operating in O-Ring mode
Fault Indicator	Amber : Indicates unexpected event occurred

10/100/1000Base-T(X) RJ45 port Indicator	Green for 1000Mbps Link/Act indicator. Amber for 10/100Mbps Link/Act indicator
100/1000Base-X SFP port Indicator	Green for port Link/Act.
Fault Contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Redundant Input Power	Dual DC inputs. 12~48 VDC on 6-pin terminal block
Power Consumption (Typ.)	10 Watts
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristics	
Enclosure	IP-30
Dimensions (W x D x H)	96.4 (W) x 105.5 (D) x 154 (H) mm (3.8 x 4.15 x 6.06 inch)
Weight (g)	1210g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 70°C (-40 to 158°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	5 years