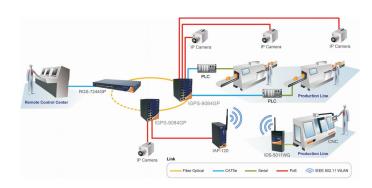


Quick Installation Guide

Introduction

IGPS-9084GP is managed redundant ring PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. ports and 4x100/1000Base-X SFP ports. With completely support of Ethernet Redundancy protocol. O-Ring (recovery time < 30ms over 250 units of connection) and MSTP (RSTP/STP compatible) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IGPS-9084GP also support Power over Ethernet, a system to transmit electrical power up to 30 watts, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each IGPS-9084GP switch has 8x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE connection. And support wide operating temperature from -40°C to 70°C. IGPS-9084GP can also be managed centralized and convenient by Open-Vision, Except the Web-based interface, Telnet and console (CLI) configuration. Therefore the switch is one of the most reliable choice for highly-managed and Fiber Ethernet

- IP-based Bandwidth Management: The switch provide advanced IP-based bandwidth management which can limit the maximum bandwidth for each IP device. User can configure IP camera and NVR with more bandwidth and limit other device handwidth
- Application-Based QoS: The switch also support application-based QoS. Application-based QoS can set highest priority for data stream according to TCP/UDP port number
- Device Binding Function : Oring special Device Binding function can only permit allowed IP address with MAC address to access the network. Hacker cannot access the IP surveillance network without permission. It can avoid hacker from stealing video privacy data and attacking IP camera. NVR and controllers.
- Advanced DOS/DDOS Auto Prevention : The switch also provided advanced DOS/DDOS auto prevention. If there is any IP flow become big in short time, the switch will lock the source IP address for certain time to prevent the attack. It's hardware based prevention so it can prevent DOS/DDOS attack immediately and completely
- IEEE 1588 Technology: The IEEE 1588 technology can fulfill precision time synchronization requirements for protection and control applications.





IGPS-9084GP

Industrial Managed Gigabit PoE Switch

Specifications

ORing Switch Model	IGPS-9084GP			
Physical Ports				
10/100/1000Base-T(X) P.S.E. Port in RJ45 Auto MDI/MDIX	8			
100/1000Base-X SFP Port	4			
Technology	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X), IEEE 802.3ab for 1000Base-T			
Ethernet Standards	IEEE 802.2 for 1000Base-1, IEEE 802.3x for Flow control, IEEE 802.3a for IACP (Link Aggregation Control Protocol) IEEE 802.1p for COS (Class of Service), IEEE 802.1q for VLAN Tagging, IEEE 802.1b for RSTP (Rapid Spanning Tree Protocol), IEEE 802.2s for MSTP (Multiple Spanning Tree Protocol), IEEE 802.1x for Authentication, IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) IEEE 802.1x for Authentication, IEEE 802.1AB for LDP (Link Layer Discovery Protocol)			
MAC Table	8K			
Priority Queues	4			
Processing	Store-and-Forward			
Switch Properties	Switch latency: 7 us Switch bandwidth: 24Gbps Max. Number of Available VLANs: 4096 [IGMP multicast groups: 126 for each VLAN Port rate limiting: User Define			
Jumbo frame	Up to 9.6K Bytes			
Security Features	Device Binding security feature Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1) to segregate and secure network traffic Radius centralized password management SMMP-3 encrypted authentication and access security Https / SSH enhance network security			
Software Features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (O-Ring)with recovery time less than 30ms over 250 units TOS/Diffsers supported Quality of Service (802.1p) for real-time traffic VLAN (802.10) with VLAN tagging and GVRP supported IGMP Snooping IP based bandwidth management Application based QoS management DOS/DOS auto prevention Port configuration, status, statistics, monitoring, security DHCP Cilent/Server SMTP Client Modbus TCP			
Network Redundancy	O-Ring Open-Ring O-Chain MRP MSTP (RSTP/STP compatible)			
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. Baud rate setting: 115200bps, 8, N, 1			
LED Indicators				
Power Indicator	Green: Power LED x3			
PoE Indicator	Green: PoE LED x 8			
R.M. Indicator	Green: Flashing to indicate system operated in O-Ring Master mode			
O-Ring indicator	Green: Indicate system operated in O-Ring mode			
Fault Indicator	Amber: Indicate unexpected event occurred			
10/100/1000Base-T(X) RJ45				
Port Indicator	Green for port Link/Act. Amber for Duplex/colision indicator			
100/1000Base-X SFP Port	Green for port Link/Act. Amber for Duplex/collision indicator Green for port Link/Act.			
100/1000Base-X SFP Port Indicator				
100/1000Base-X SFP Port Indicator Fault Contact	Green for port Link/Act.			
100/1000Base-X SFP Port Indicator Fault Contact Relay				
100/1000Base-X SFP Port Indicator Fault Contact Relay	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.)	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H)	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.)			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g)	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption (Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.) 1230g			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.)			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption (Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.) 1230g			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.) 1230g -40 to 85°C (-40 to 185°F)			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present 1P-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.) 1230g -40 to 85°C (-40 to 185°F) -40 to 70°C (40 to 158°F) 5% to 95% Non-condensing			
100/1000Base-X SFP Port Indicator Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature	Green for port Link/Act. Relay output to carry capacity of 1A at 24 VDC Dual DC input 50~57VDC on 6-pin terminal block 13.2 Watts Present Not Present IP-30 96.4(W)x108.5(D)x154(H) mm (3.8x4.27x6.06 inch.) 1230g -40 to 85°C (-40 to 185°F) -40 to 70°C (40 to 185°F)			

Shock	IEC60068-2-27	
Free Fall	IEC60068-2-32	
Vibration	IEC60068-2-6	
Safety	EN60950-1	

Features

- > Support O-Ring (recovery time < 30ms over 250 units of connection) and MSTP (RSTP/STP compatible) for Ethernet Redundancy
- > Open-Ring support the other vendor's ring technology in open architecture
- > O-Chain allow multiple redundant network rings
- > Support standard IEC 62439 MRP (Media Redundancy Protocol) function
- > 8 ports 10/100/1000Base-T(X) P.S.E. fully compliant with IEEE802.3 at standard, provide up to 30 Watts per port
- > Support PoE scheduled configuration and PoE auto-ping check function
- > Support IEEE 1588v2 clock synchronization
- > Support IPV6 new internet protocol version
- > Support Modbus TCP protocol
- > Support IEEE 802.3az Energy-Efficient Ethernet technology
- > Provided HTTPS/SSH protocol to enhance network security
- > Support SMTP client
- > Supports IP based bandwidth management
- > Supports application based QoS management
- > Support Device Binding security function
- > Supports DOS/DDOS auto prevention
- > IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- > Supports SNMP v1/v2c/v3, RMON and 802.1Q VLAN Network Management
- > Support ACL, 802.1x User Authentication for security
- > Supports 9.6K Bytes Jumbo Frame
- > Multiple notification for warning of unexpected event
- > Web-based, Telnet, Console (CLI), and Windows utility (Open-Vision)
- > Support LLDP Protocol
- > Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

→ PoE Pin Definition

RJ45 Pin Definition			
Description			
TD+ with PoE Power input +			
TD- with PoE Power input +			
RD+ with PoE Power input -			
RD- with PoE Power input -			

● 10/100Base-T(X) P.S.E. RJ-45 Port ● 100Base-T P.S.E. RJ-45 Port

RJ	RJ45 Pin Definition			
Pin No.	Description			
# 1	BI_DA+ with PoE Power input +			
# 2	BI_DA- with PoE Power input +			
#3	BI_DB+ with PoE Power input -			
# 4	BI_DC+			
# 5	BI_DC-			
# 6	BI_DB- with PoE Power input -			
# 7	BI_DD+			
#8	BI_DD-			

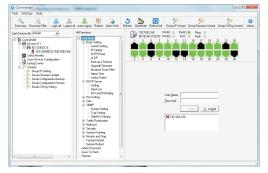
QIG IGPS-9084GP **PRINTED ON RECYCLED PAPER Quick Installation Guide** 1907-2-29-IGPS9084GP-0



Quick Installation Guide

- Open-Vision

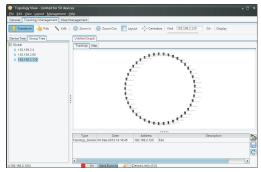
 $ORing \'s \ switches \ are \ intelligent \ switches. \ Different \ from \ other \ traditional \ redundant$ switches, ORing provides a set of Windows utility (Open-Vision) for user to manage and monitor all of industrial Ethernet switches on the industrial network



Host Monitor



Topology View

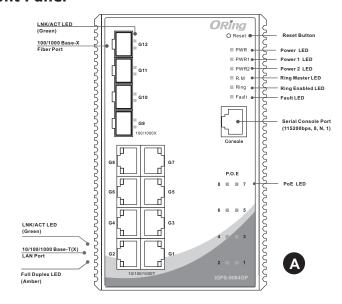


▶ Packing list

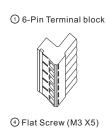
Model name	Front Panel	Model Description	Accessory
IGPS-9084GP	A	Industrial 12-port managed Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. ports and 4x100/1000Base-X, SFP socket	①X1, ②X8, ③X4, ④X6, ⑤X1, ⑥X1, ⑦X2, ⑥X1, ⑥X1

IGPS-9084GP

Front Panel



Accessory

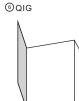


7 Wall-mounted kit



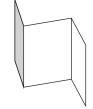
(5) CD



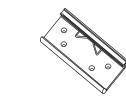




(8) Console Cable

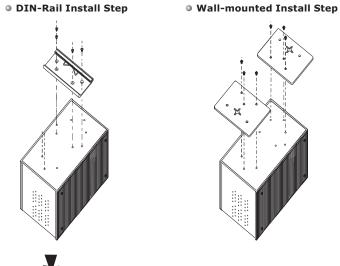






Industrial Managed Gigabit PoE Switch









₽ Power Connection Guide

