

IGPS-7084GP



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Industrial 12-port managed Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. ports and 4x1000Base-X, SFP socket

Features

- Supports 8x10/100/1000Base-T(X) ports and 4x1000Base-X SFP ports
- 8 ports of **P.S.E.** fully compliant with IEEE802.3at standard, providing up to 30 Watts per port
- Supports Jumbo frame up to 9K Bytes
- Supports **O-Ring** (recovery time < 30ms over 250 units of connection), MSTP/RSTP/STP (IEEE 802.1s/w/D) for Ethernet Redundancy
- Supports IPV6 new internet protocol version
- Provided HTTPS/SSH protocol to enhance network security
- Supports SMTP client
- Supports IP-based bandwidth management
- Supports application-based QoS management
- Supports Device Binding security function
- Supports DOS/DDOS auto prevention
- Supports PoE scheduled configuration and PoE auto-ping check function
- Supports SSH/Https / security function
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- Supports SNMP v1/v2c/v3, RMON and 802.1Q VLAN Network Management
- Supports ACL, 802.1x User Authentication for security
- Multiple notification for warning of unexpected event
- Windows utility (**Open-Vision v3.0 or above**) supporting centralized management and configuration by Web-based interface, Telnet and Console (CLI)
- Supports LLDP Protocol
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

Thunder POE

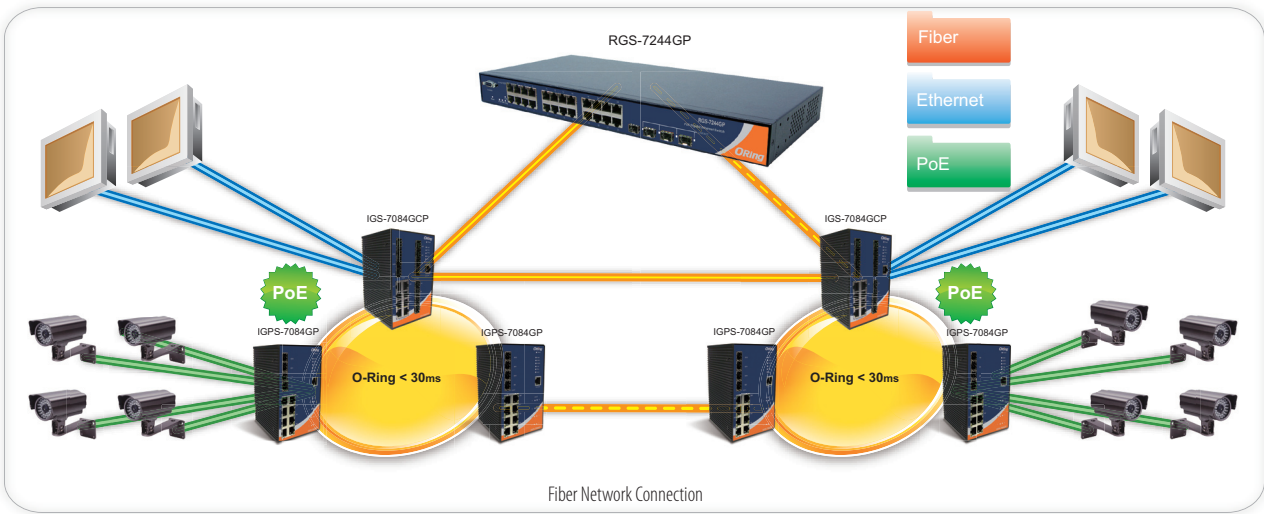


Introduction

IGPS-7084GP is full Gigabit Managed Redundant Ring PoE Ethernet switch with 8x10/100/1000Base-T(X) ports with PoE (P.S.E.) function and 4x1000Base-X SFP ports. With complete support of Ethernet Redundancy protocol, **O-Ring** (recovery time < 30ms over 250 units of connection) and MSTP/RSTP/STP (IEEE 802.1s/w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology.

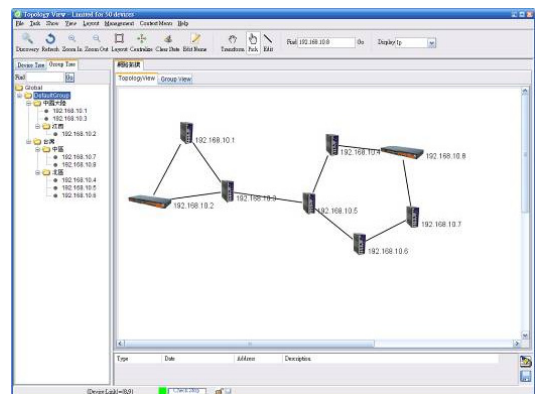
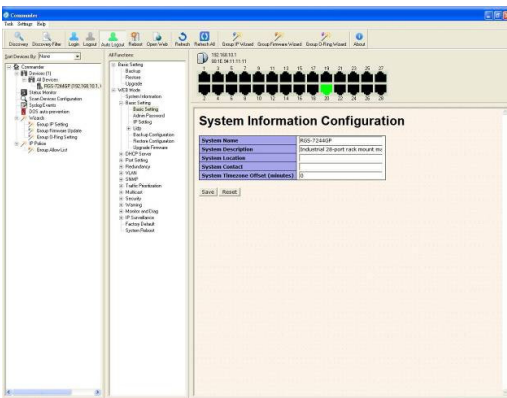
ORing's thunder switch series provide advanced IP-based bandwidth management which can limit the maximum bandwidth for each IP device. User can configure IP camera and NVR with more bandwidth and limit other device bandwidth. ORing's thunder switch series also support application-based QoS. Application-based QoS can set highest priority for data stream according to TCP/UDP port number. ORing's special Device Binding function can permit only allowed IP address with specific MAC address to access the networking. 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. ORing's thunder series switch also provided advanced DOS/DDOS auto prevention. If there is any IP flow become big in short time, ORing's thunder 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 quickly and effective. IGPS-7084GP 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-7084GP 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 all functions of IGPS-7084GP can also be managed centralized and convenient by Open-Vision v3.0 or above, Except the Web-based interface, Telnet and console (CLI) configuration are also available. Therefore, the switch is one of the most reliable choice for highly-managed and Gigabit Fiber Ethernet application.

Practical Operation

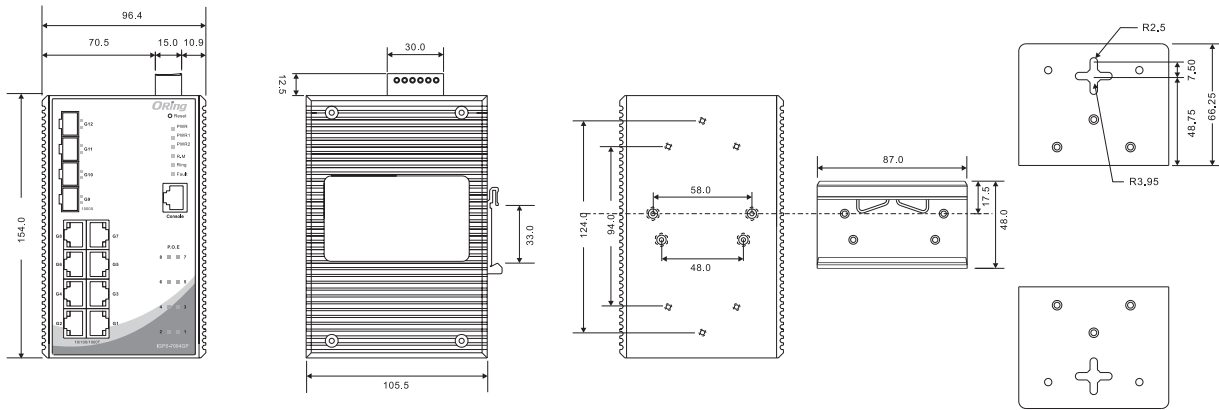


Open-Vision

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.



Dimensions



(Unit=mm)

PoE Pin Definition

10/100Base-T(X) P.S.E. RJ-45 Port	
RJ-45 Pin Definition	
Pin No.	Description
#1	TD+ with PoE Power input +
#2	TD- with PoE Power input +
#3	RD+ with PoE Power input -
#6	RD- with PoE Power input -

1000Base-T P.S.E. RJ-45 Port	
RJ-45 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-

Specifications

ORing Switch Model	IGPS-7084GP
Physical Ports	
10/100/1000Base-T(X) with P.S.E. ports in RJ45 Auto MDI/MDIX	8
1000Base-X SFP Port	4
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX 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) 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) IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency: 7 μ s Switching bandwidth: 24Gbps Max. Number of Available VLANs : 256 IGMP multicast groups: 128 for each VLAN Port rate limiting: User Define
Jumbo frame	Up to 9K Bytes
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 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/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP supported IGMP Snooping IP-based bandwidth management Application-based QoS management DOS/DDOS auto prevention Port configuration, status, statistics, monitoring, security DHCP Client/Server SMTP Client
Network Redundancy	O-Ring Fast Recovery Mode STP / RSTP MSTP
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 3
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 port Link/Act.

PoE indicator	Green for PoE power injected
1000Base-X Fiber 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. 50VDC on 6-pin terminal block
Power Consumption (Typ.)	20Watts (power device not included)
Overload Current Protection	Present
Reverse polarity protection	NOT Present
Physical Characteristics	
Enclosure	IP-30
Dimensions (W x D x H)	96.4 (W) x 108.5 (D) x 154 (H) mm (3.8 x 4.27 x 6.06 inch)
Weight (g)	1400 g
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
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	311,532
Warranty	5 years

Ordering Information

IGPS-7 **AA** **B** **CC**

Code Definition	Gigabit P.S.E. Port Number	Additional Port Number	Additional Port Type
Option	- 08 : 8 ports	- 4 : 4 ports	- GP : 1000Base-X SFP

Available Model	Model Name	Description
	IGPS-7084GP	Industrial 12-port managed Gigabit PoE Ethernet switch with 8x10/100/100Base-T(X) P.S.E. ports and 4x1000Base-X, SFP socket

Packing List

- IGPS-7084GP
- DIN-Rail Kit
- Wall-mount Kit
- Console Cable
- ORing Tool CD
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP device
- SFP1G series, 1Gbps SFP optical transceiver
- DR-75-48, 75W DIN-Rail power supply
- DR-120-48, 120W DIN-Rail power supply
- SDR-240-48, 240W DIN-Rail power supply
- SDR-480-48, 480W DIN-Rail power supply