RGPS-7244GP / RGPS-7244GP-P

Industrial 28-port rack-mount managed Gigabit PoE Ethernet switch with 24x10/100/1000Base-T(X) P.S.E. and 4x1000Base-X, SFP socket

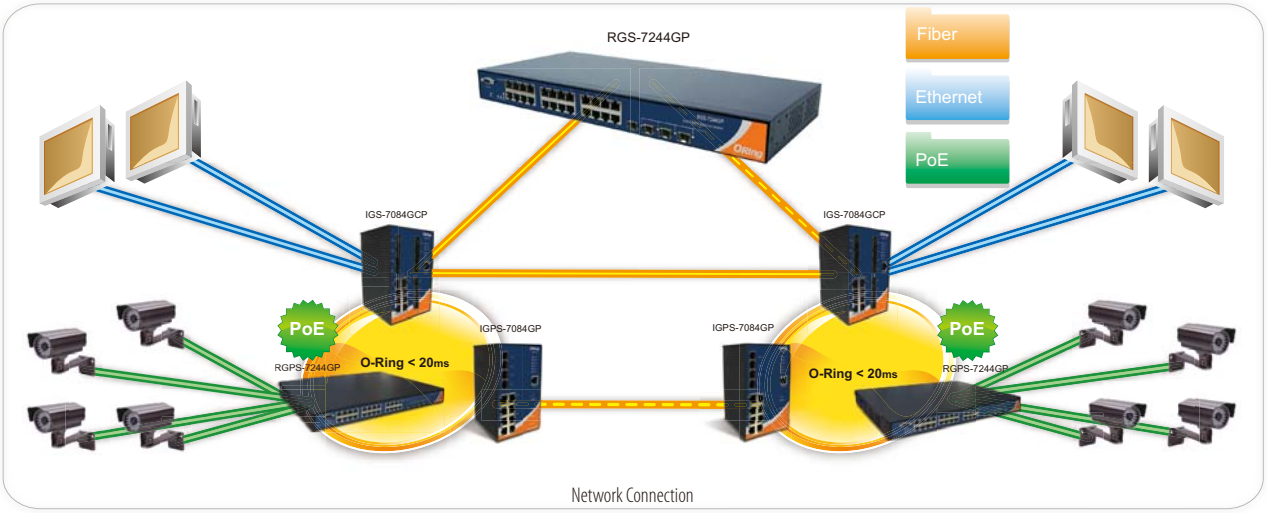
Features

- Support O-Ring (recovery time < 20ms over 250 units of connection), MSTP/RSTP/STP (IEEE 802.1s/w/D) for Ethernet Redundancy
- Support Jumbo frame up to 9K Bytes
- 24 ports of 10/100/1000Base-T(X) P.S.E. fully compliant with IEEE802.3at standard, provide up to 30 Watts per port
- Power supply included (RGPS-7244GP-P model only)
- Support IP-based bandwidth management
- Support application-based QoS management
- Support IP police security function
- Support DOS/DDOS auto prevention
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- Support SNMP v1/v2c/v3, RMON and 802.1Q VLAN Network Management
- Support ACL, 802.1x User Authentication for security
- Multiple notification for warning of unexpected event
- Windows utility (Open-Vision v3.0) support centralized management and configurable by Web-based interface, Telnet and Console (CLI)
- Support LLDP Protocol
- 19 inches rack-mountable design

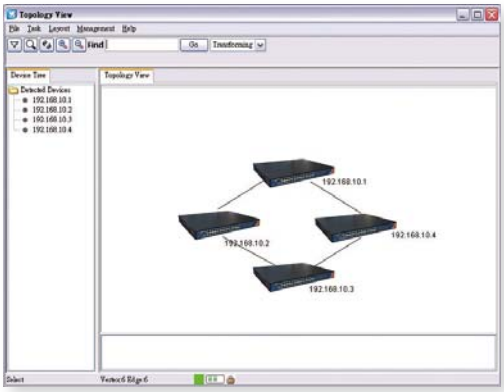
Introduction

RGPS-7244GP series is managed Redundant Ring Ethernet switch with 24x10/100/1000Base-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 < 20ms over 250 units of connection) and MSTP/RSTP/STP (IEEE 802.1 s/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 IP police function can only permit allowed IP address with 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 immediately and completely. RGPS-7244GP series 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 RGPS-7244GP series switch has 24X10/100/1000Base-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. All function of RGPS-7244GP series can be managed centralized and convenient by a powerful windows utility — Open-Vision v3.0 or above. Therefore, these switches are one of the most reliable choice for highly-managed and Gigabit Fiber Ethernet application with PoE function.

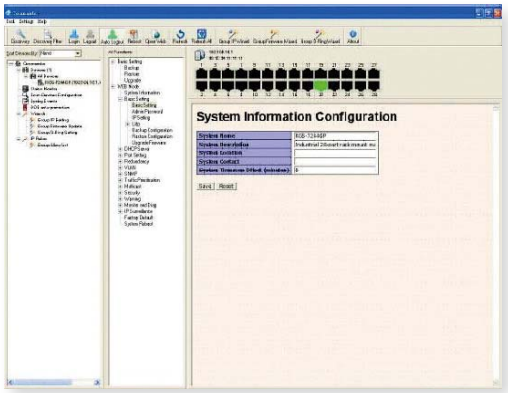
Application



Network Connection

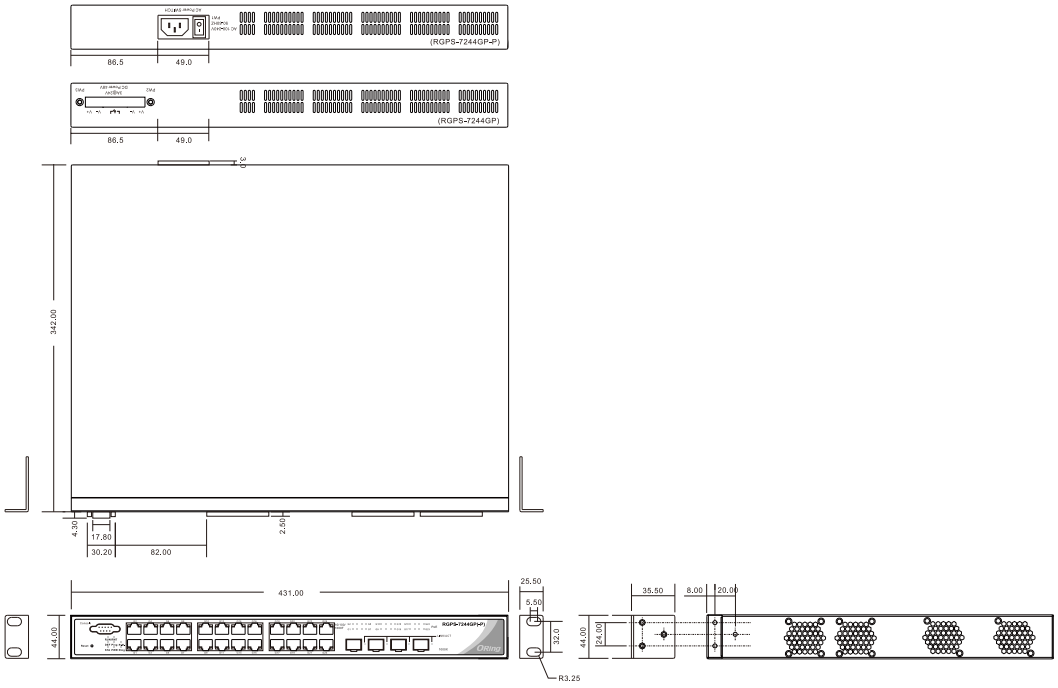


Topology View



Monitoring and Configuration interface

Dimensions



(Unit=mm)

Specifications

ORing Switch Model	RGPS-7244GP	RGPS-7244GP-P
Physical Ports		
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX with P.S.E.	24	
1000Base-X SFP Port	4	
Technology		
Ethernet standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.z for 1000Base-X IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1D for STP (Spanning Tree Protocol) 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	8K	
Priority queues	4	
Processing	Store-and-Forward	
Switch properties	Switching latency : 7 µs Switching bandwidth : 56Gbps 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	IP Police 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	
Software features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (O-Ring) with recovery time less than 20ms 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	
Network redundancy	O-Ring STP RSTP MSTP	
RS-232 Serial Console Port	RS-232 in DB9 connector with console cable. 115200bps, 8, N, 1	
LED Indicators		
Power indicator (PWR)	Green : For DC power indicator	Green : For AC power indicator
System ready indicator (STA)	Green : Indicates system ready. Blinking for system is upgrading firmware.	
Ring master indicator (R.M.)	Green : Indicates system operating in O-Ring Master mode	
O-Ring indicator (Ring)	Green : Indicates system operating in O-Ring mode. Blinking to indicate Ring is broken.	
Sysem runnig indicator (RUN)	Green : System operated continuously	
Supervisor login indicator (RMT)	Green : System is accessed remotely	
Reset to Default running indicator (DEF)	Green : System reset to default configuration	
Ping command to the switch indicator (Ping)	Green : System is processing "PING" request	

PoE indicator	Green for P.S.E. power output indicator	
10/100/1000Base-T(X) RJ45 port indicator	Two color LED : Green for 1000Mbps Link/Act indicator. Amber for 10/100Mbps Link/Act indicator	
1000Base-X SFP Fiber port indicator	Green for port Link/Act.	
Power		
Input power	One 50VDC power inputs at terminal block	One 100~240VAC with power cord
Power supply	NOT included	Included
Power consumption (Typ.)	36Watts (Typ.), 756W(24 ports P.S.E. full loaded)	
Overload current protection	Present	
Physical Characteristics		
Enclosure	19 inches rack-mountable	
Dimensions (W x D x H)	431 (W) x 342 (D) x 44 (H) mm	
Weight (g)	3790 g	5740 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	
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	245,478	30,632
Warranty	5 years	

Ordering Information

RGPS-7 AA B CC - D

Code Definition	10/100/1000Base-T(X) P.S.E. Port Number	Additional Port Number	Additional Port Type	Built-In Power Supply
Option	**- 24:** 24 ports	**- 4:** 4 port	**-GP:** 1000Base-X SFP ports	**-P:** power supply included

	Model Name	Description	Operating Temperature
Available Model	RGPS-7244GP	Industrial 28-port rack-mount managed Gigabit PoE Ethernet switch with 24x10/100/1000Base-T(X) P.S.E. and 4x1000Base-X, SFP socket	
	RGPS-7244GP-P_US	Industrial 28-port rack-mount managed Gigabit PoE Ethernet switch with 24x10/100/1000Base-T(X) P.S.E. and 4x1000Base-X, SFP socket, power supply included, US power cord	
	RGPS-7244GP-P_EU	Industrial 28-port rack-mount managed Gigabit PoE Ethernet switch with 24x10/100/1000Base-T(X) P.S.E. and 4x1000Base-X, SFP socket, power supply included, EU power cord	

Packing List

- RGPS-7244GP/7244GP-P
- Rack-Mount Kit
- Console Cable
- Power Cable (Only for -P)
- ORing Tool CD
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP devices
- SFP1G series, 1Gbps SFP optical transceiver