1

Industrial Ethernet Switch

RGS-7244GP / RGS-7244GP-E

❯ *Industrial 28-port rack-mount managed Gigabit Ethernet switch with 24x10/100/1000Base-T(X) and 4x1000Base-X, SFP socket*

Features

- Support 24x10/100/1000Base-T(X) and 4x1000Base-X SFP ports
- Support Jumbo frame up to 9K Bytes
- Support **O-Ring** (recovery time < 20ms over 250 units of connection), MSTP/RSTP/STP (IEEE 802.1s/w/D) for Ethernet Redundancy
- 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**) supports centralized management and configurable by Web-based interface, Telnet and Console (CLI)
- Support LLDP Protocol
- Event notification through Syslog, Email, SNMP trap, and Relay output (for -E module)
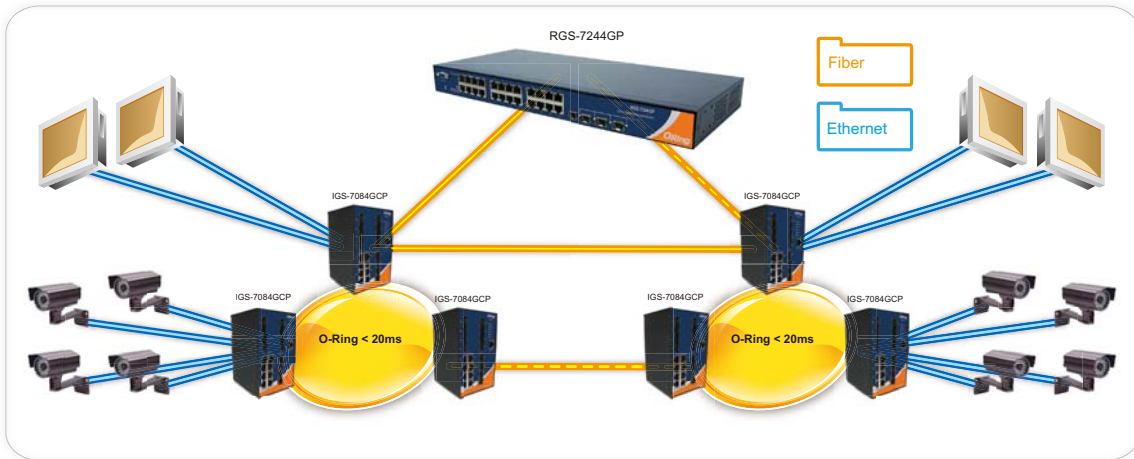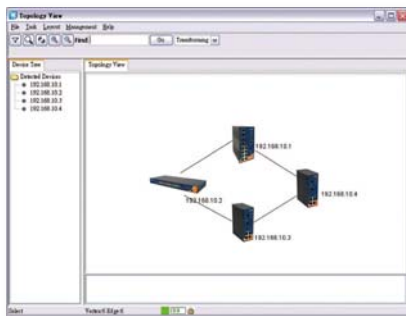- 19-inch rack-mountable design

Introduction

RGS-7244GP series are the managed redundant ring Ethernet switches with 24x10/100/1000Base-(TX) ports 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 802.1s/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 Series Ethernet switches 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 permit only 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 is hardware-based prevention so it can prevent DDOS attack immediately and completely. And all functions of RGS-7244GP can also be managed centralized and convenient by Open-Vision v3.0, Except the Web-based interface, Telnet and console (CLI) configuration. Therefore, the switch is one of the most reliable choice for highly-managed and Gigabit Fiber Ethernet application.
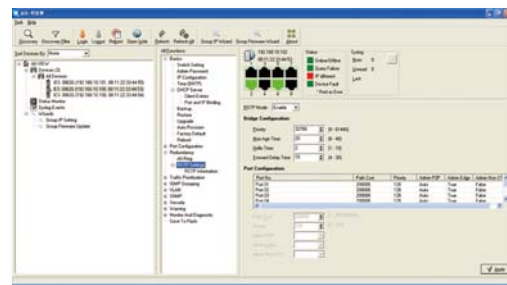
Open-Vision

ORing's switches are intelligent switches. Different form 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.

RGS-7244GP

Fiber

Ethernet

IGS-7084GCP

IGS-7084GCP

IGS-7084GCP   IGS-7084GCP

IGS-7084GCP   IGS-7084GCP

O-Ring < 20ms

O-Ring < 20ms

Network connection

Topology View

Group IP Setting Wizard

Monitoring and Configuration interface

Application

Network connection

MOD + TV

O-Ring < 20ms

Company Information

2011 Product Overview

Vertical Market Applications

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

USB-Over-IP Server

Accessories

Network Management Utility
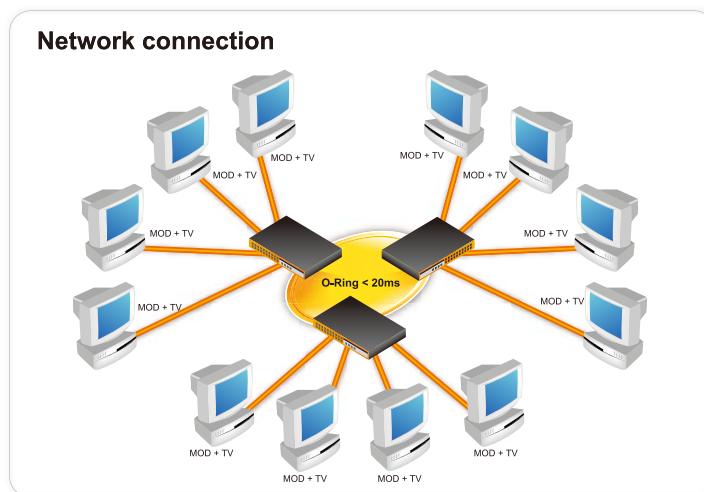
Dimensions
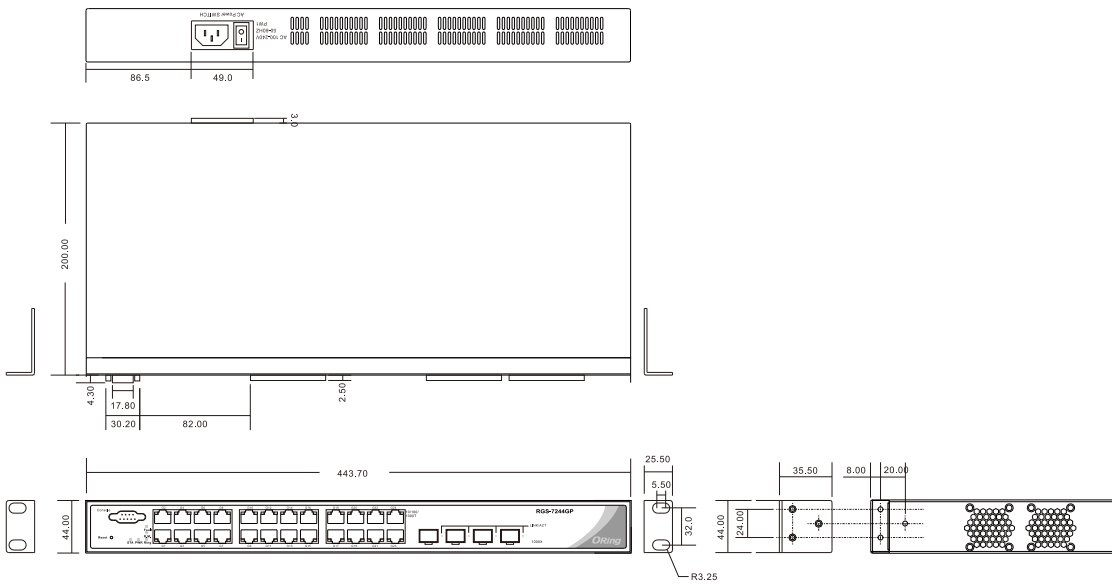
RGS-7244GP

RGS-7244GP-E
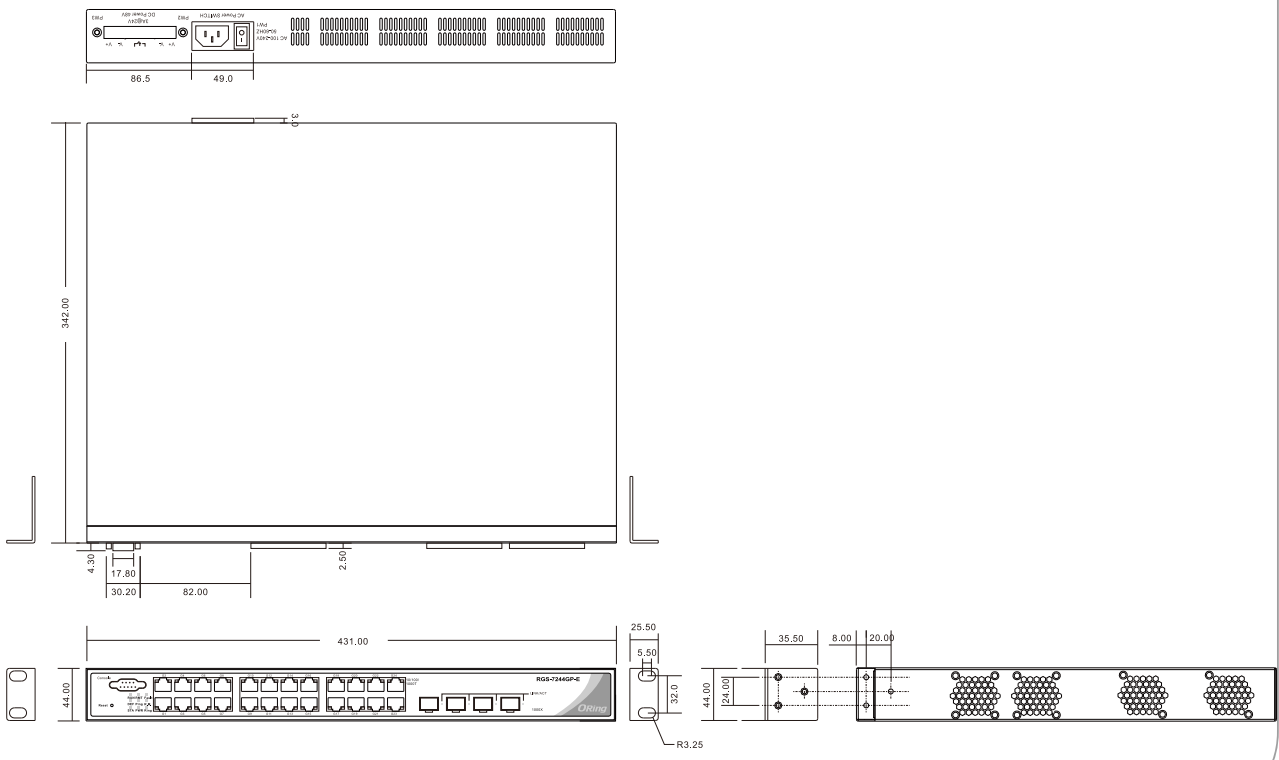
(Unit=mm)

Specifications

ORing Switch Model	RGS-7244GP	RGS-7244GP-E
Physical Ports		
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX	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)
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 : Power indicator for AC	Green : Power indicator for AC and DC
Power-1 Indicator (PW1)	N/A	Green : Indicates Power-1 input
Power-2 Indicator (PW2)	N/A	Green : Indicates Power-2 input
Power-3 Indicator (PW3)	N/A	Green : Indicates Power-3 input
System-Ready Indicator (STA)	Green : Indicates that the system is ready. The LED is blinking when the system is upgrading firmware.	
Ring Master Indicator (R.M.)	Green : Indicates that the system is operating in O-Ring Master mode.	
O-Ring Indicator (Ring)	Green : Indicates that the system is operating in O-Ring mode *Blinking* indicates that the Ring is broken.	
Fault Indicator (Fault)	N/A	Amber : Indicates unexpected event occurred
Sysem Runnig Indicator (RUN)	Green : System is operating continuously	
Supervisor Login Indicator (RMT)	Green : System is accessed remotely	
Reset To Default Running Indicator (DEF)	Green : System resets to default configuration	
Ping Command To The Switch Indicator (Ping)	Green : System is processing "PING" request	
10/100/1000Base-T(X) RJ45 Port Indicator	Left Green for 1000Mbps Link/Act indicator. Amber for 10/100Mbps Link/Act indicator. Right Amber for full-duplex indicator.	
100/1000Base-X SFP Port Indicator	Green for port Link/Act.	

Company Information

2011 Product Overview

Vertical Market Applications

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Industrial USB-Over-IP Server

Accessories

Network Management Utility

Fault Contact		
Relay	N/A	Relay output to carry capacity of 1A at 24VDC
Power		
Redundant Input Power	100~240VAC with power cord	100~240VAC with power cord, dual 36 ~ 72VDC power inputs at 6-pin terminal block
Power Consumption (Typ.)	36 Watts	36 Watts
Overload Current Protection	Present	
Physical Characteristics		
Enclosure	19-inch rack-mountable	
Dimensions (W x D x H)	443.7(W) x 200(D) x 44mm(H) mm	431 (W) x 342 (D) x 44 (H) mm
Weight (g)	2700 g	4250g
Environmental		
Storage Temperature	–40 to 85℃ (-40 to 185°F)	
Operating Temperature	–40 to 70℃ (-40 to 140°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℃)	84,479	64,339
Warranty	5 years	

Ordering Information

RGS-7 AA B CC - D

Code Definition	10/100/1000Base-T(X) Port Number	Additional Port Number	Additional Port Type	Model Type
Option	**- 24:** 24 ports	**- 4:** 4 ports	**-GP:** 1000Base-X SFP ports	**-E:** enhanced model with enhanced function

	Model Name	Description
Available Model	RGS-7244GP_US	Industrial 28-port rack-mount managed Gigabit Ethernet switch with 24x10/100/1000Base-T(X) and 4x1000Base-X, SFP socket, US power cord
	RGS-7244GP_EU	Industrial 28-port rack-mount managed Gigabit Ethernet switch with 24x10/100/1000Base-T(X) and 4x1000Base-X, SFP socket, EU power cord
	RGS-7244GP-E_US	Industrial 28-port rack-mount managed Gigabit Ethernet switch with 24x10/100/1000Base-T(X) and 4x1000Base-X, SFP socket, enhanced version, US power cord
	RGS-7244GP-E_EU	Industrial 28-port rack-mount managed Gigabit Ethernet switch with 24x10/100/1000Base-T(X) and 4x1000Base-X, SFP socket, enhanced version, EU power cord

Packing List
- RGS-7244GP / RGS-7244GP-E
- ORing Tool CD
- Quick Installation Guide
- Rack-Mount Kit
- Console Cable
- Power Cable

Optional Accessories (Can be purchased separately)
- Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP devices
- SFP1G series, 1Gbps SFP optical transceiver
- DR-75-48 : 48V/75Watts DIN-Rail power supply (Only for –E)
- DR-120-48 : 48V/120Watts DIN-Rail power supply (Only for –E)