

RGS-7244GP / RGS-7244GP-E



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 < 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
- Support IP-based bandwidth management
- Support application-based QoS management
- Support Device Binding 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

Thunder Rack

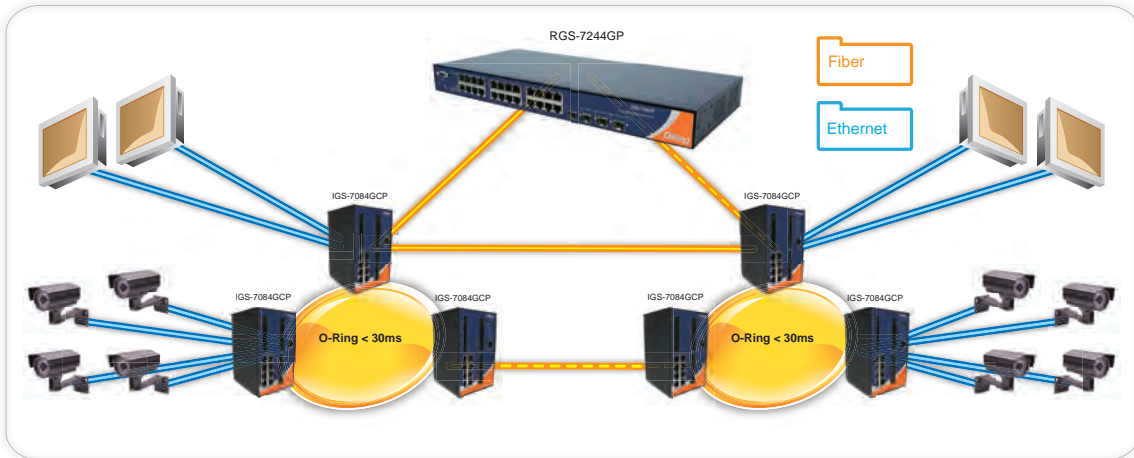


Introduction

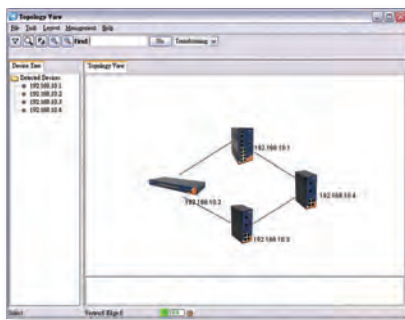
RGS-7244GP series are the managed redundant ring Ethernet switches with 24x10/100/1000Base-(TX) ports and 4x1000Base-X SFP ports. With complete support of Ethernet Redundancy protocol, **O-Ring** (recovery time < 30ms over 250 units of connection) and **MSTP/RSTP/STP** (IEEE 802.1s/w/D) can protect your 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 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 Device Binding 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

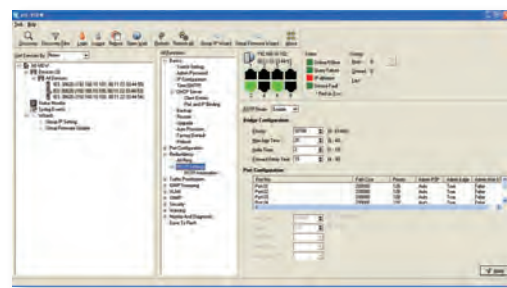
ORing's switches are intelligent switches. Different from other traditional redundant switches, ORing provides a set of Windows utility (Open-Vision) for user to manage and monitor all of industrial Ethernet switches on the industrial network.



Network connection

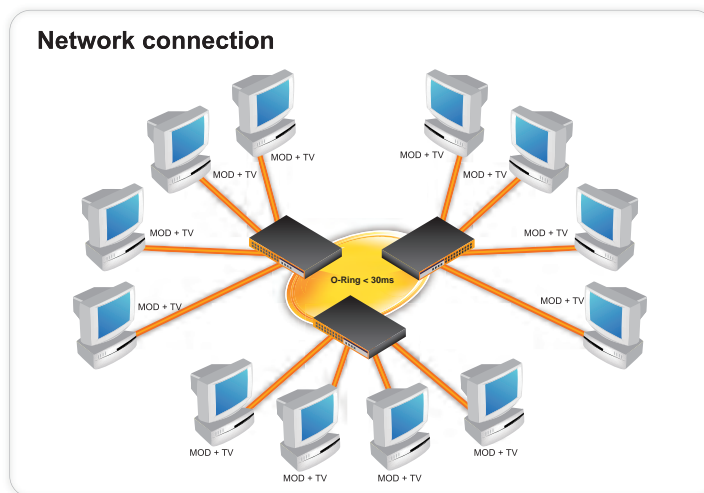


Topology View



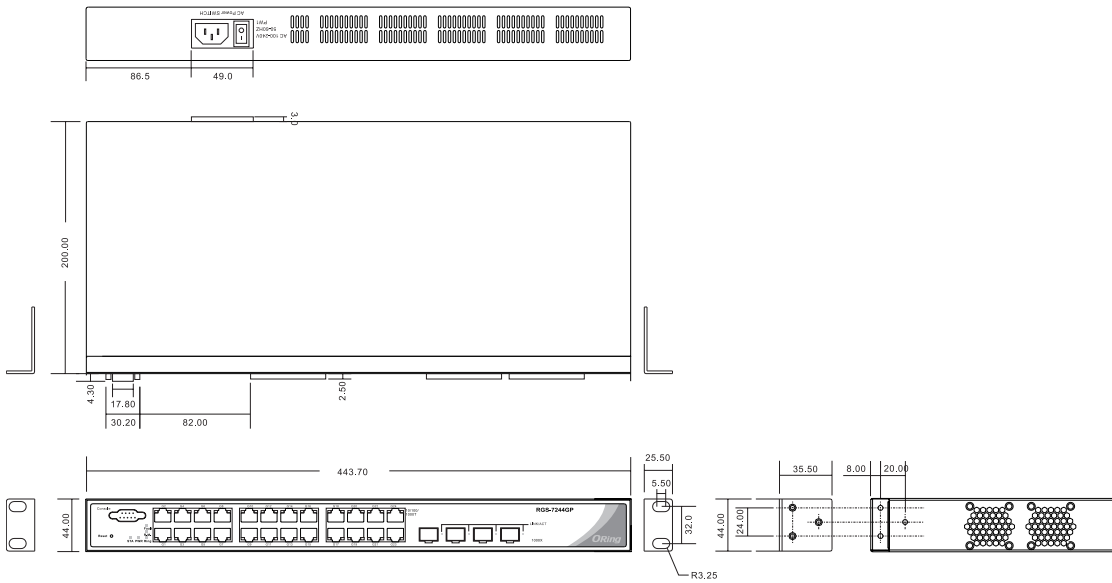
Monitoring and Configuration interface

Application

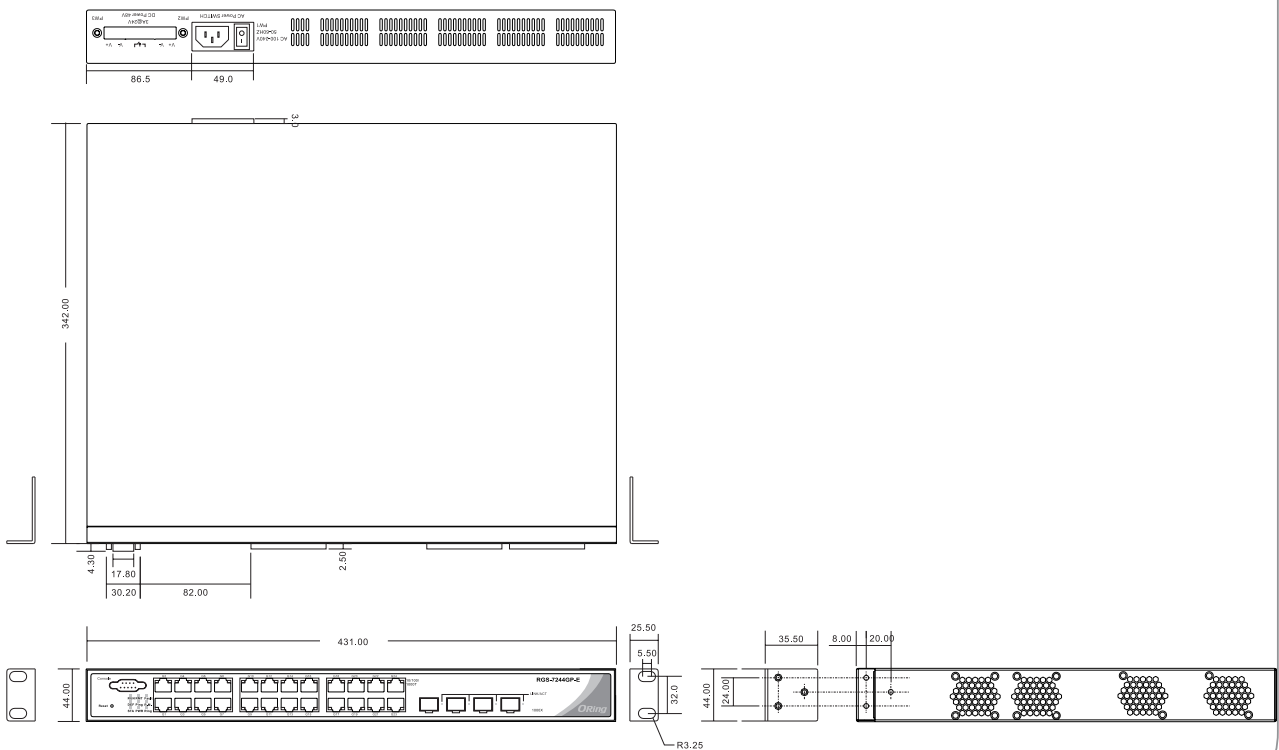


Dimensions

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 μ s 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 | 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 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. <i>Blinking</i> indicates that the Ring is broken. |
| Fault Indicator (Fault) | N/A Amber : Indicates unexpected event occurred |
| System Running 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. |

| 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°C (-40 to 185°F) | |
| Operating Temperature | -40 to 70°C (-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°C) | 73,130 | 63,776 |
| 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 |

| Available Model | Model Name | Description |
|-----------------|-----------------|--|
| | 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 |

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|--|--|
| Packing List <ul style="list-style-type: none"> RGS-7244GP / RGS-7244GP-E ORing Tool CD Quick Installation Guide Rack-Mount Kit Console Cable Power Cable | Optional Accessories (Can be purchased separately) <ul style="list-style-type: none"> 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 model) DR-120-48 : 48V/120Watts DIN-Rail power supply (Only for -E model) SDR-240-48, 240W DIN-Rail power supply SDR-480-48, 480W DIN-Rail power supply |
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Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Accessories

Network Management Software