# **RES-3242GC / RES-3242GC-E**



## Industrial 26-port rack-mount managed Ethernet switch series

#### **Features**

- Fastest Redundant Ethernet Ring: **O-Ring** (recovery time < 10ms over 250 units of connection)
- **Open-Ring** supports the other vendor's ring technology in open
- O-RSTP supports applications with complex topology
- Secured ACL supported
- MSTP/RSTP/STP(IEEE 802.1s/w/D)
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- Port Trunking for easy of bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- Event notification through Syslog, Email, SNMP trap, and Relay Output
- Include 100~240 VAC and Dual +12~+48 VDC or -12~-48 VDC power inputs for "-E" model
- Extend operating temperature from -40 to 70°C for "-E" model
- Bundled Windows utility (Open-Vision) supports centralization management and configurable by Web-based , Telnet, Console (CLI)
- 19 inches rack-mountable
- Support LLDP Protocol















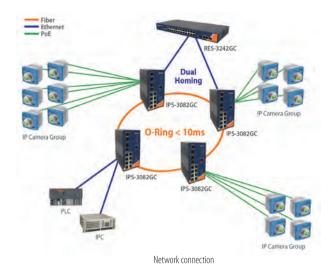


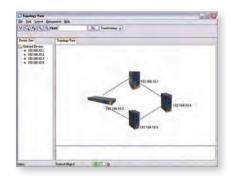
### Introduction

RES-3242GC series is 26-port rack-mount managed Redundant Ring Ethernet switch with 24x10/100Base-T(X) and 2xGigabit Combo ports, SFP socket. With complete support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-RSTP 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. RES-3242GC series can be managed centralized and convenient by a powerful windows utility — Open-Vision. RES-3242GC series also supports functions of network management, such as SNMP, RMON, Port Trunking, and Port/Tag-based VLAN security. RES-3242GC-E model support one full-range AC and dual DC power inputs from +12~48 VDC or -12~-48 VDC, and support extend operating temperature from -40 to 70°C. One additional relay output is provided for system alarm warning, Therefore, RES-3242GC series is one of the most reliable choice for highly-managed and 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.



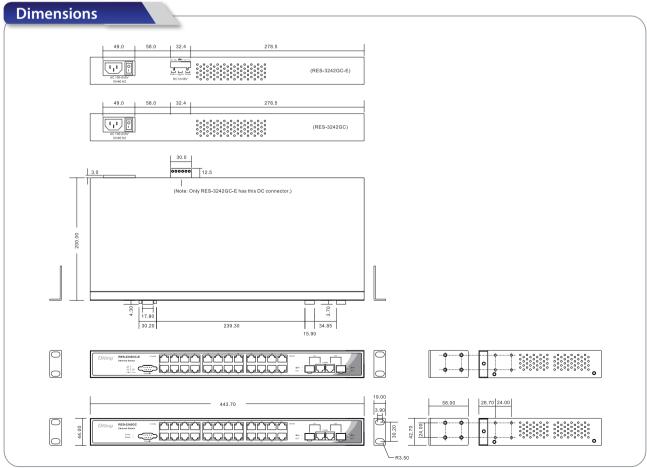


Topology View





Monitoring and Configuration interface



(Unit=mm)

## Specifications

ORing Switch Model	RES-3242GC	RES-3242GC-E
Physical Ports		
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	24	ļ.
Gigabit combo port with 10/100/1000Base-T(X) and 1000Base-X SFP	2	
RS-232 Serial Console Port	RS-232 in DB9 connector with console cable. 9600bps, 8, N, 1	
Technology		
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow control IEEE 802.3d 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 802.1x for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1X for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)	
MAC Table	8192 MAC addresses	
Priority Queues	4	
Processing	Store-and-Forward	
Switch Properties	Switching bandwidth : 8.8Gbps Max. Number of Available VLANs : 4096 IGMP multicast groups : 1024 Port rate limiting : User Define	
Security Features	Enable/disable ports, MAC based port security ACL supported Port based network access control (802.1x) VLAN (802.1q) to segregate and secure network traffic Radius centralized password management SNMP v1/v2c/v3 encrypted authentication and access security	1
Software Features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (O-Ring) with recovery time less than 10ms or TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP supported IGMP Snooping for multicast filtering Port configuration, status, statistics, monitoring, security SNTP for synchronizing of clocks over network Supports PTP Client (Precision Time Protocol) clock synchron DHCP Server / Client support Port Trunk support MVR (Multicast VLAN Registration) support	
Network Redundancy	O-Ring Open-Ring O-RSTP STP RSTP MSTP	
Warning / Monitoring System	Relay output for fault event alarming (only for RES-3242GC-E) Syslog server / client to record and view events Include SMTP for event warning notification via email Event selection support	
LED Indicators		
Power Indicator	Green for power on	Green: Power LED x 4
Status Indicator	Green: Indicates that the system is ready	
R.M. Indicator	Green: Indicates that the system is operating in O-Ring Maste	r mode
O-Ring Indicator	Green: Indicates that the system is operating in O-Ring mode	

Fault Indocator	-	Amber : Indicates unexpected event occurred	
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for 100Mbps link		
10/100/1000Base-T(X) / SFP Port Indicator	Green for port Link/Act		
Power			
Redundant Input Power	100~240VAC with power cord	$100\sim240$ VAC with power cord and dual $+12\sim+48$ VDC or $-12\sim-48$ VDC inputs in 6-pin terminal block	
Power Consumption (Typ.)	18 Watts		
Overload Current Protection	Present		
Physical Characteristics			
Dimensions (W x D x H)	443.7(W) x 200(D) x 44mm(H) mm (17.47x7.88x1.73 inch.)		
		2590 g	
Weight (g)	2490 g	2590 g	
Weight (g) Environmental	2490 g	2590 g	
	2490 g -40 to 85°C (-40 to 185°F)	2590 g	
Environmental		2590 g -40 to 70°C (-40 to 158°F)	
Environmental Storage Temperature	-40 to 85°C (-40 to 185°F)		
Environmental Storage Temperature Operating Temperature	-40 to 85°C (-40 to 185°F) -10 to 60°C (-14 to 140°F)		
Environmental Storage Temperature Operating Temperature Operating Humidity	-40 to 85°C (-40 to 185°F) -10 to 60°C (-14 to 140°F)		
Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals	-40 to 85°C (-40 to 185°F) -10 to 60°C (-14 to 140°F) 5% to 95% Non-condensing	-40 to 70°C (-40 to 158°F)	
Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI	-40 to 85°C (-40 to 185°F) -10 to 60°C (-14 to 140°F) 5% to 95% Non-condensing  FCC Part 15, CISPR (EN55022) class A EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT)	-40 to 70°C (-40 to 158°F)	

## **Ordering Information**

RES-3 AABCC - D



	Model Name	Description	Operating Temperature
Available Model	RES-3242GC_US	Industrial 26-port rack-mount managed Ethernet switch with 24x10/100Base-T(X) and 2xGigabit combo ports, SFP socket, US power cord	-10 to 60°C
	RES-3242GC_EU	Industrial 26-port rack-mount managed Ethernet switch with 24x10/100Base-T(X) and 2xGigabit combo ports, SFP socket, EU power cord	-10 to 60°C
	RES-3242GC-E_US	Industrial 26-port rack-mount managed Ethernet switch with 24x10/100Base-T(X) and 2xGigabit combo ports, SFP socket, enhanced version, US power cord	-40 to 70°C
	RES-3242GC-E_EU	Industrial 26-port rack-mount managed Ethernet switch with 24x10/100Base-T(X) and 2xGigabit combo ports, SFP socket, enhanced version, EU power cord	-40 to 70°C
Packing List  RES-3242GC/3242GC-E  Rack-Mount Kit  Console Cable  Power Cable  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  DR-45-48, 45W DIN-Rail power supply (only for RES-3242GC-E)  DR-75-48, 75W DIN-Rail power supply (only for RES-3242GC-E)  DR-120-48, 120W DIN-Rail power supply (only for RES-3242GC-E)  SDR-240-48, 240W DIN-Rail power supply  SDR-480-48, 480W DIN-Rail power supply	