ORing Industrial Networking Corp.

Version 1.2

SWITCH REDUNDANT INDUSTRIAL

Quick Installation Guide

IES-3240

Industrial Managed Ethernet Switch

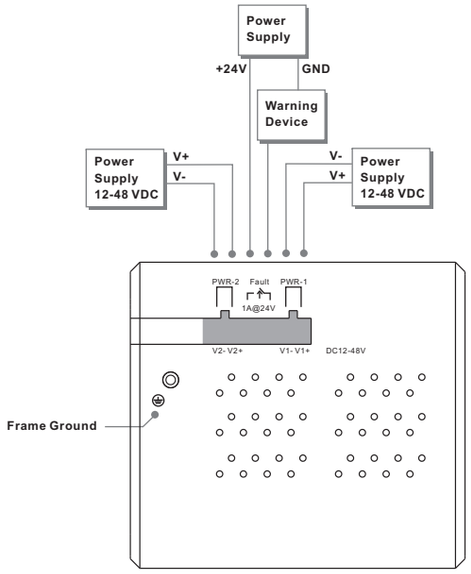
Introduction

IES-3240 is a managed Redundant Ring Ethernet switch with 24x10/100Base-T(X) ports. With completely support of **O-Ring (recovery time < 10 ms over 250 units of connection)**, the switch can protect your mission - critical applications from network interruptions or temporary malfunctions with its fast recovery technology. All function of **IES-3240** can be managed centralized and convenient by a powerful windows utility: **Open-Vision.** In addition, the wide operating temperature range from - 40 to 70°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choice for highly-managed and Fiber Ethernet application.

Features

- World's fastest Ethernet Redundant Ring: O-Ring (recovery time < 10ms over 250 units of connection)
- Open-Ring support the other vendor's ring technology in open architecture
- O-RSTP support applications with complex topology
- IGMP snooping for filtering multicast traffic
- Port Trunking for easy of bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- RMON for traffic monitoring
- Event notification through Syslog, Email, SNMP trap, and Relay Output
- Port lock to prevent access from unauthorized MAC address
- Windows utility (Open-Vision) support centralized management and configurable by Web-based interface ,Telnet, Console, CLI
- Dual redundant DC power inputs on terminal block
- Very wide operating temperature range from -40 to 70°C
- Rigid IP-30 housing design

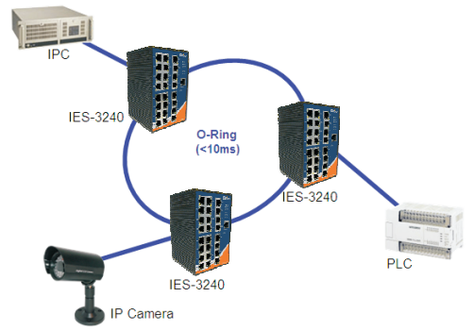
Power Connection Guide



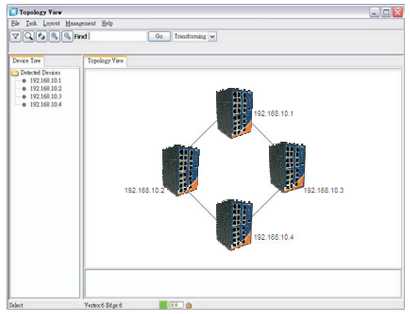
Open-Vision

IES-3240 is an intelligent switch. Different from other traditional redundant switches, **IES-3240** provides a set of Windows utility (Open-Vision) for user to manage and monitor all of industrial Ethernet switches in the industrial network.

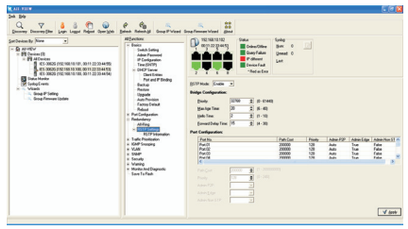
Network connectiong

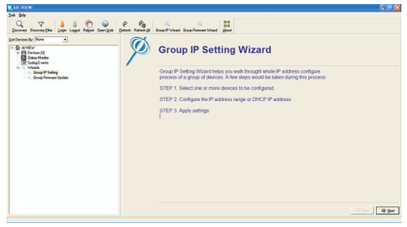


Topology View



Monitoring and Configuration interface





Specifications

Switch Model	IES-3240
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	24
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX 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)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching bandwidth: 4.8Gbps Max. Number of Available VLANs: 4096 IGMP multicast groups: 1024 Port rate limiting: User Define
Security Features	Enable/disable ports, MAC based port security 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) World's Fastest Ethernet Redundant Ring with recovery time less than 10ms 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 for multicast filtering Port configuration, status, statistics, monitoring, security
Network Redundancy	O-Ring, O-Chain STP RSTP MSTP
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1
LED indicators	
Power indicator	Green: Power LED x 3
R.M. Indicator	Green: indicate system operated in Ring Master mode
Fault Indicator	Amber: Indicate unexcepted event occurred
10/100TX RJ45 Port Indicator	Green for port Link/Act. Amber for Duplex/Collision
Fault contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block
Power consumption(Typ.)	9.6 Watts
Reverse polarity protection	Present
Overload current protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	96(W)x109.2(D)x153.6(H) mm (3.78x4.3x6.05 inch)
Weight (g)	1052g
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
Warranty	5 years

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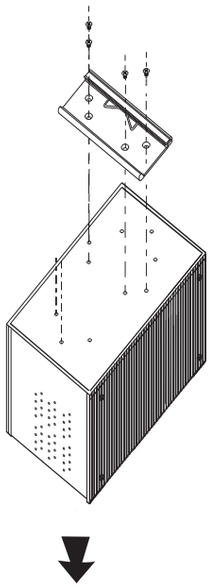
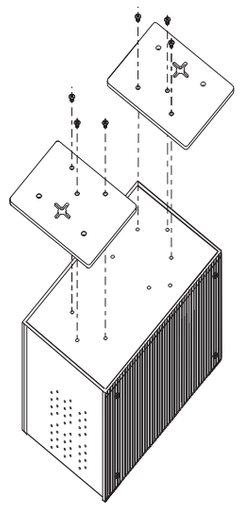
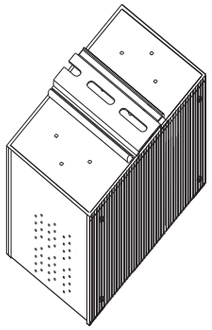
Installation

DIN-Rail Install Step



Wall-mountedl Install Step





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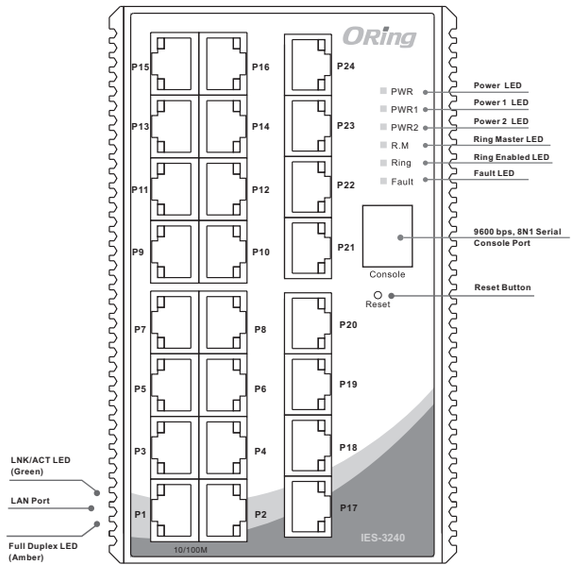
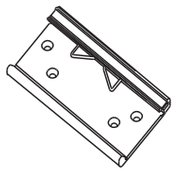
Front Panel

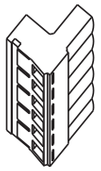


Accessory

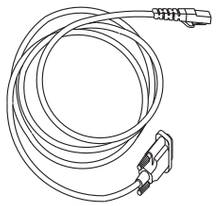
① DIN-Rail kit



② 6-Pin Terminal block

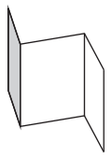


③ Console Cable



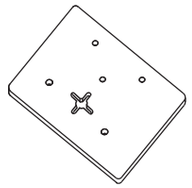
④ Dust Cover

⑤ QIG



⑥ CD

⑦ Wall-mounted kit



Packing list

Model Name	Model Description	Accessory
IES-3240	Industrial 24-port Managed Ethernet Switch with 24 x10/100 Base-T(X) ports	①X 1, ②X 1, ③X 1, ④X 24, ⑤X 1, ⑥X 1, ⑦X 1

Communication Connections

10/100BaseT(X) Ethernet Port Connection

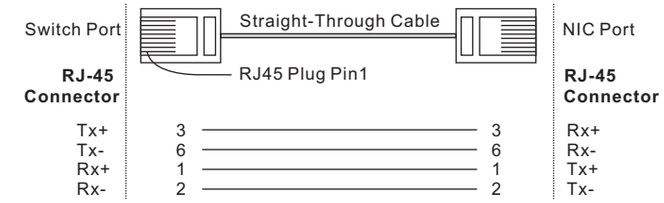
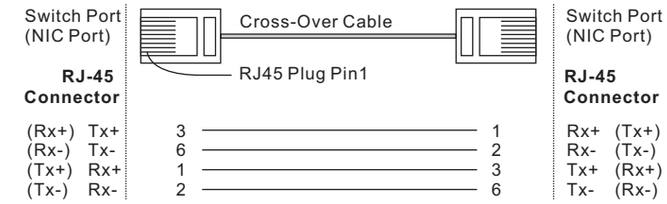
■ RJ45 (8-pin, MDI) Port Pinouts

Pin	Single
1	Tx+
2	Tx-
3	Rx+
6	Rx-

■ RJ45 (8-pin, MDI-X) Port Pinouts

Pin	Single
1	Rx+
2	Rx-
3	Tx+
6	Tx-

■ RJ45 (8-pin) to RJ45 (8-Pin) Straight-Through Cable Wiring



■ RJ45 (8-pin) to RJ45 (8-Pin) Cross-Over Cable Wiring