

Industrial 24-port managed Ethernet switch with 24x10/100Base-T(X)

Features

- World's fastest Redundant Ethernet 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
- STP/RSTP/MSTP supported
- Support PTP Client (Precision Time Protocol) clock synchronization
- 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
- 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
- Support LLDP Protocol
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled













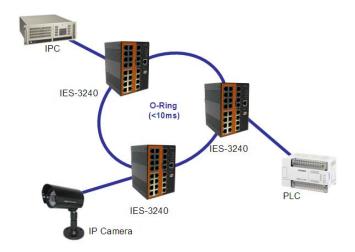
Introduction

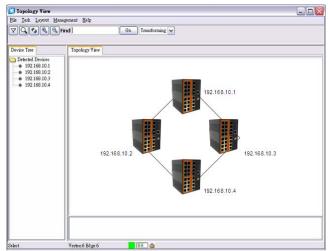
IES-3240 is a managed Redundant Ring Ethernet switch with 24x10/100Base-T(X) ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-RSTP and MSTP/RSTP/STP (IEEE 802.1s/w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. All function of IES-3240 can be managed centralized and 70°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choice for highly-managed Ethernet application.

Open-Vision

IES-3240 is an intelligent switch. Different form 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.

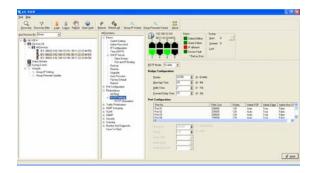






Network connection

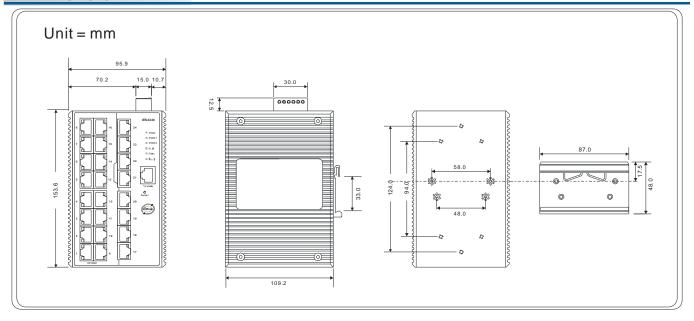
Topology View





Monitoring and Configuration interface

Dimension



Specifications

ORing Switch Model	IES-3240
Physical Ports	
10/100 Base-T(X) Ports in RJ45	24
Auto MDI/MDIX	
Technology	LEFE 002 2 for 10Door T
	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X)
	IEEE 802.3x for Flow control
	IEEE 802.3ad for LACP (Link Aggregation Control Protocol)
	IEEE 802.1D for STP (Spanning Tree Protocol)
Ethernet Standards	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
MAC Table	IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) 8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
	Switching bandwidth: 4.8 Gbps
0 11 10 11	Max. Number of Available VLANs: 4096
Switch Properties	IGMP multicast groups: 1024
	Port rate limiting: User Define
	Enable/disable ports, MAC based port security
	Port based network access control (802.1x)
Security Features	VLAN (802.1Q) to segregate and secure network traffic
-	Supports Q-in-Q VLAN for performance & security to expand the VLAN space
	Radius centralized password management SNMP V1/V2c/V3 encrypted authentication and access security
	STP/RSTP/MSTP (IEEE 802.1D/w/s)
	Redundant Ring (O-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
Software Features	IGMP Snooping for multicast filtering
	Port configuration, status, statistics, monitoring, security
	SNTP for synchronizing of clocks over network Support PTP Client (Projector Time Protocol) clock synchronization
	Support PTP Client (Precision Time Protocol) clock synchronization DHCP Server / Client support
	Port Trunk support
	MVR (Multicast VLAN Registration) support
	O-Ring
	Open-Ring Open-Ring
Network Redundancy	O-RSTP
	STP
	RSTP MSTP
	Relay output for fault event alarming
	Syslog server / client to record and view events
Warning / Monitoring System	Include SMTP for event warning notification via email
	Event selection support
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 O-Ring master mode
Fault Indicator	Amber : Indicate unexpected event occurred
10/100Base-T(X) 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	
Overload current protection	Present	
Reverse polarity 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 (3.78 x 4.3 x 6.05 inch)	
Weight (g)	1052 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	
Safety	EN60950-1	
Warranty	5 years	

Ordering Information



Code Definition	10/100Base-T(X) Port Number	Additional Port Number
Option	- 24: 24 ports	- 0 : 0 port
Available Model	Model Name	Description
	IES-3240	Industrial 24-port managed Ethernet switch with 24x10/100Base-T(X)

Packing List

• IES-3240 x 1

- ORing Tool CD x 1
- Quick Installation Guide x 1

- DIN-Rail Kit x 1
- Wall-mount Kit x 1
- Console Cable x 1

Optional Accessories

- Open-Vision M500 : Powerful Network

 Management Windows Utility Suit, 500 IP devices
- DR-120 series : 120 Watts DIN-Rail power supply
- DR-45 series : 45 Watts DIN-Rail power supply
- DR-75 series : 75 Watts DIN-Rail power supply