IES-2060/2042FX

Industrial 6-port Lite-Managed Ethernet Switch

Highlights

· Supports **O-Ring** (recovery time < 10ms over 250 units of connection), RSTP/STP (IEEE 802.1w/D) for Ethernet Redundancy

· Multiple notification for warning of excepted event

· Web-based and Windows utility (Open-Vision) configuration

· Triple Redundant DC power inputs

· Supports 10/100 Base-T(X) and 100 Base-FX

Features

· World's fastest Redundant Ethernet Ring: **O-Ring** (recovery time < 10ms over 250 units of connection)

· Multiple Redundant Ethernet technology RSTP/STP, **O-Ring** supported to protect your industrial network

· SNMP v1 support for secured network management

· Configurable by Web-based and Windows utility **(Open-Vision)**

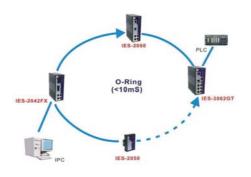· Triple redundant DC power inputs of terminal block and power jack

· Event notification through Syslog, Email, and SNMP trap.

· Two 100Base-FX fiber port support for long distance connection

· Very wide operating temperature range from -40°C to 70°C

· Rigid IP-30 housing design

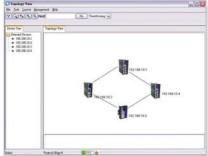· DIN-Rail and panel mounting enabled

Introduction

IES-2060/2042FX is lite-managed Redundant Ring Ethernet switches with 6x10/100TX ports or 4x10/100TX and 2x100Base-FX ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection) and RSTP/STP (IEEE 802.1w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IES-2060/2042FX can be managed centralized and convenient by a powerful windows utility — Open-Vision. In addition, the wide operating temperature range from -40°C to 70°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choice for easy managed and Fiber Ethernet application.

Open-Vision

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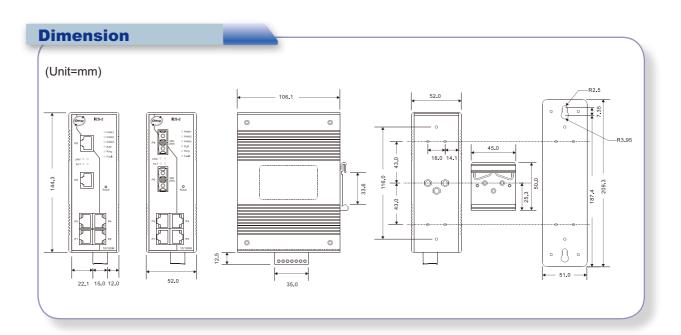

Network connection

Topology View
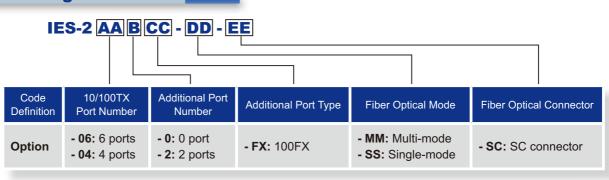

Monitoring and Configuration interface

Dimension

(Unit=mm)

Specifications

ORing Switch Model	IES-2060	IES-2042FX-MM	IES-2042FX-SS
Physical Ports			
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	6	4	4
100Base-FX Multimode ports (2KM, 1310nm, SC connector)		2	
100Base-FX Singlemode ports (30KM, 1550nm, SC connector)			2
Technology			
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) and 100Base-FX, IEEE 802.3x for Flow control IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)		
MAC Table	2048 MAC addresses		
Priority Queues	4		
Processing	Store-and-Forward		
Switch Properties	Switching bandwidth: 1.0Gbps VLAN: Port Based		
Security Feature	Enable/disable ports VLAN to segregate and secure network traffic		
Software Features	STP/RSTP (IEEE 802.1D/w) Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units Port configuration, status, statistics, monitoring, security		
Network Redundancy	O-Ring STP RSTP		
LED indicators			
Power indicator	Green : Power LED x 3		
R.M. indicator	Green : Flashing to indicate system operated in O-Ring Master mode		
O-Ring indicator	Green : Indicate system operated in O-Ring mode		
Fault indicator	Yellow : Indicate excepted event occurred		
10/100TX RJ45 port indicator	Green for port Link/Act. Yellow for Duplex/Collision		
1000 Base-T / Fiber port indicator	Green for port Link/Act. Yellow for Link		
Fault contact			
Relay	Relay output to carry capacity of 1A at 24VDC		
Power			
Redundant Input power	Triple DC inputs. 12-48VDC on 7-pin terminal block, 12-45VDC on power jack		
Power consumption (Typ.)	5 W	7 W	7 W
Overload current protection	Present		
Reverse polarity protection	Present on terminal block		
Physical Characteristic			
Enclosure	IP-30		
Dimension (W x D x H)	52(W)x106(D)x144(H) mm (2.05x4.17x5.67 inch.)		
Weight (g)	657 g	670 g	670 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
Warranty	5 years

Ordering Information

IES-2 AA B CC - DD - EE

Code Definition	10/100TX Port Number	Additional Port Number	Additional Port Type	Fiber Optical Mode	Fiber Optical Connector
Option	**- 06:** 6 ports **- 04:** 4 ports	**- 0:** 0 port **- 2:** 2 ports	**- FX:** 100FX	**- MM:** Multi-mode **- SS:** Single-mode	**- SC:** SC connector

	Model Name	Description
Available Model	IES-2060	Industrial 6-port Lite-Managed Ethernet Switch with 6x10/100TX
	IES-2042FX-MM-SC	Industrial 6-port Lite-Managed Ethernet Switch with 4x10/100TX & 2x100FX (Multi-mode)
	IES-2042FX-SS-SC	Industrial 6-port Lite-Managed Ethernet Switch with 4x10/100TX & 2x100FX (Single-mode)