IPS-2042TX/2042FX

Industrial 6-port Lite-Managed P.O.E 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
- 4 ports support P.S.E base on IEEE 802.3af standard up to 25 Watts per port
- Supports 10/100Base-T(X) and 100 Base-FX

Features

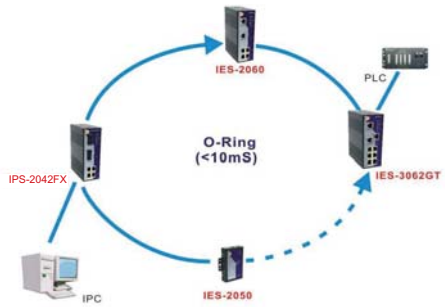
- World's fastest Redundant Ethernet Ring: **O-Ring** (Recovery time < 10ms over 250 units of connection)
- Multiple Redundant Ethernet technology RSTP/STP, **O-Ring** supported
- SNMP v1 support for secured network management
- Configurable by Web-based and Windows utility **(Open-Vision)**
- Triple 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
- 4 ports support P.S.E based on IEEE 802.3af standard up tp 25 Watts per port
- Very wide operating temperature range from -40°C to 70°C
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

Introduction

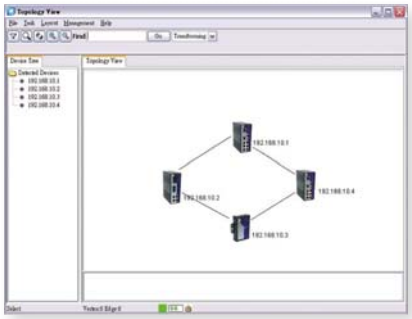
IPS-2042TX/2042FX are lite-managed Redundant Ring Ethernet switches with 4x10/100TX ports with PoE PSE function and 2x10/100TX or 2x100Base-FX ports. IPS series support Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each IPS switch has 4X10/100TX PSE (Power Sourcing Equipment) ports. PSE is a device (switch or hub for instance) that will provide power in a PoE setup. 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. IPS-2042TX/2042FX can be managed centralized and convenient by a powerful windows utility — Open-Vision. 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

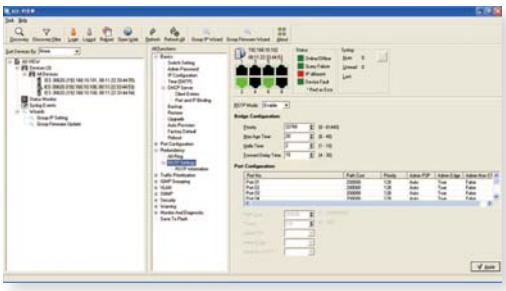
ORing's switches are intelligent switches. Different form other traditional redundant switches, ORing provide a set of Windows utility (**Open-Vision**) for user to manage and monitor all of industrial Ethernet switches on the industrial network.



Network connection



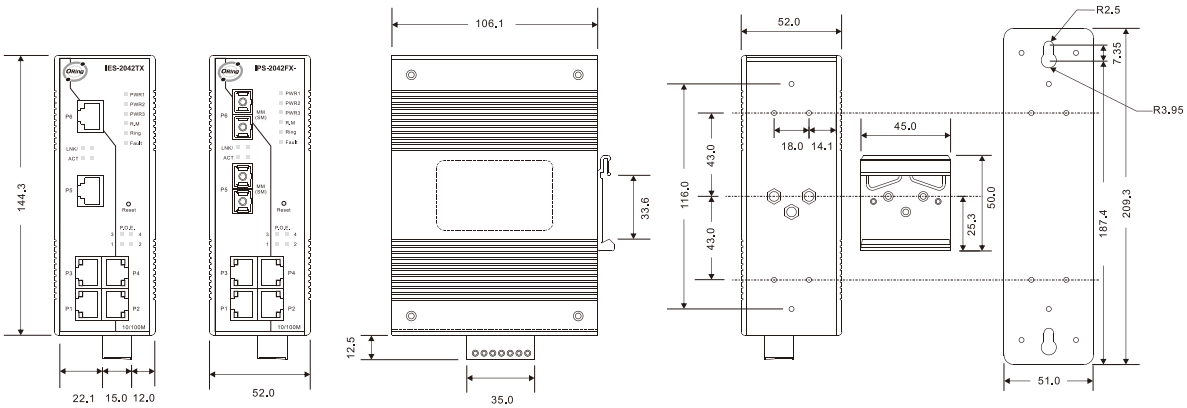
Topology View



Monitoring and Configuration interface

Dimension

(Unit=mm)



Specifications

ORing Switch Model	IPS-2042TX	IPS-2042FX-MM	IPS-2042FX-SS
Physical Ports			
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX with PSE	4	4	4
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX without PSE	2		
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) IEEE802.1AB for LLDP (Link Layer Discovery Protocol) IEEE 802.3af PoE specification (up to 25 Watts per port for PSE)		
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		
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)	696 g	709 g	709 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

IPS-2 AA B CC - DD - EE

Code Definition	10/100TX w/ P.O.E. Port Number	Additional Port Number	Additional Port Type	Fiber Optical Mode	Fiber Optical Connector
Option	**- 04:** 4 ports	**- 2:** 2 ports	**- FX:** 100FX **- TX:** 10/100TX	**- MM:** Multi-mode **- SS:** Single-mode	**- SC:** SC connector

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