## IES-2042PA

# ➤ Industrial 6-port slim type lite-managed Ethernet switch with 4x10/100Base-T(X) and 2x100Base-FX, SFP socket

#### **Features**

- 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-Chain** support the multiple redundant ring technology
- Supports 4 ports 10/100Base-T(X) and 2 ports 100Base-FX SFP Port
- SNMP v1/v2c/v3 ,http server, telnet server support
- Web-based interface, telnet server and Windows utility (Open-Vision) configuration
- Event notification through Syslog, Email, SNMP trap, and relay
- Provides Web / Windows Utility / DIP-Switch function to set Ring
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled
- Supports LLDP Protocol

















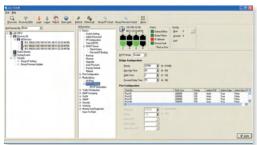
#### Introduction

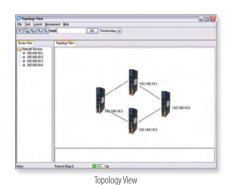
IES-2042PA is a Lite-Managed Redundant Ring Ethernet switch. With very compact size of housing, you can install IES-2042PA easily. In addition, it also supports of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection) and Open-Ring, O-Chain and STP/RSTP(IEEE802.1w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IES-2042PA provides the setting ability of Web-GUI and Windows Utility, also support the simple DIP-Switch setting function which offers great flexibility to set up the Ring. With it's rigid IP-30 housing design, it can operate under harsh environment. The feature of wide operating temperature range from -40 to 70°C can satisfy most requirement of operation.

#### **Open-Vision**

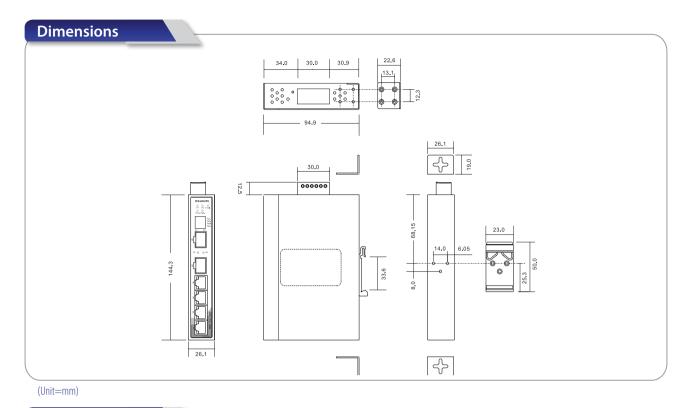
IES-2042PA can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, O-Ring redundant technology is supported to quarantee a non-stop operation.







Monitoring and Configuration interface



#### **Specifications**

ORing Switch Model	IES-2042PA	
Physical Ports		
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	4	
100Base-FX SFP Ports	2	
Technology		
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX 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	1024 MAC addresses	
Priority Queues	4	
Processing	Store-and-Forward	
Switch Properties	Switching bandwidth: 1.2Gbps VLAN: Port Based	
Security Features	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 DHCP Client Port base VLAN LLDP (Link Layer Discovery Protocol) Port configuration, status, statistics, monitoring, security SNMP v1/v2c/v3 and private MIB support	
Network Redundancy	O-Ring Open-Ring O-Chain Fast recovery STP RSTP	
DIP-Switch Setting		
P.F.	When power fault enable relay warning system (On: Enable, Off: Disable function)	
R.E.	Enable/Disable O-Ring function (On : Enable, Off : Disable)	
R.M.	Enable/Disable Ring Master Mode (On : Enable, Off : Disable)	
R.S.	O-Ring redundant port select ( On : ring port set to port-5 and port-6, Off : ring port set to port-1 and port-2 )	

LED Indicators		
Power Indicator	Green LED x 2	
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for Link	
100Base-FX SFP Port Indicator	Green for port Link/Act	
R.M. Indicator	Green: Indicates that the system is operating in O-Ring Master mode	
0-Ring Indicator	Green: Indicates port operated in 0-Ring mode	
Fault Indicator	Amber : Indicates unexpected event occurred	
Fault Contact		
Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Input Power	Dual 12~48 VDC power input at 6-pin terminal block	
Power Consumption (Typ.)	7 Watts	
Overload Current Protection	Present	
Reverse Polarity Protection	Present	
Physical Characteristics		
Enclosure	IP-30	
Dimensions (W x D x H)	26.1 mm (W) x 95 mm(D) x 144.3 mm(H)	
Weight (g)	395 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	
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	576,511	
Warranty	5 years	

### Ordering Information



Code Definition	10/100Base-T(X) Port Number	Additional Port Number	Additional Port Type
Option	- <b>04:</b> 4 ports	- 2: 2 port	- P: 100Base-FX SFP port

Available	Model Name	Description	
Model	IES-2042PA	Industrial 6-port slim type lite-managed Ethernet switch with 4x10/100Base-T(X) and 2x100Base-FX, SFP socket	
Packing List  • IES-2042PA  • DIN-Rail Kit  • Wall-mount Kit  • ORing Tool CD  • Quick Installation Guide		Optional Accessories (Can be purchased separately)  Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP devices  FP100 series, 100Mbps SFP optical transceiver  DR-45 series, 45W DIN-Rail power supply  DR-75 series, 75W DIN-Rail power supply  DR-120 series, 120W DIN-Rail power supply  SDR-240-48, 240W DIN-Rail power supply  SDR-480-48. 480W DIN-Rail power supply	