



IES-2042PA

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

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



Introduction

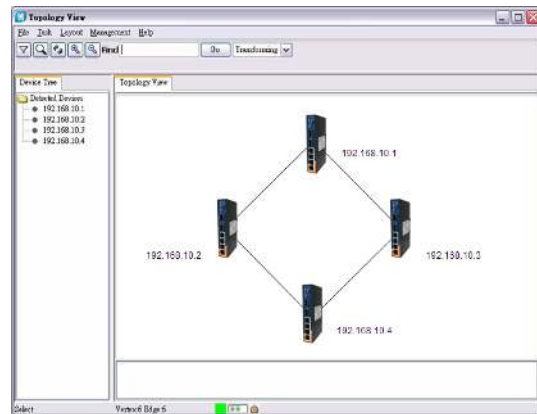
IES-2042PA is a Lite-Managed Redundant Ring Ethernet switch. With very compact size of housing, you can install IES-2042PA easily. In addition, it also supports of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-Chain and STP/RSTP (IEEE802.1w/D) 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 its rigid IP-30 housing design, it can operate under harsh environment. The feature of wide operating temperature range from -40°C to 70°C can satisfy most requirement of operation.

Practical Operation

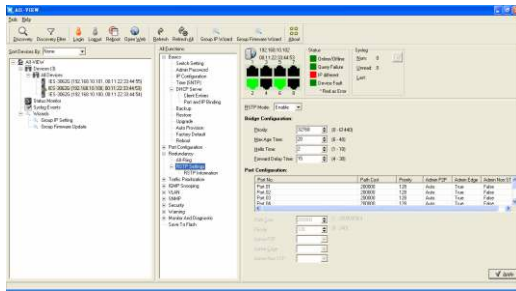
IES-2042PA can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, O-Ring redundant technology is supported to guarantee a non-stop operation.



Connections of redundancy

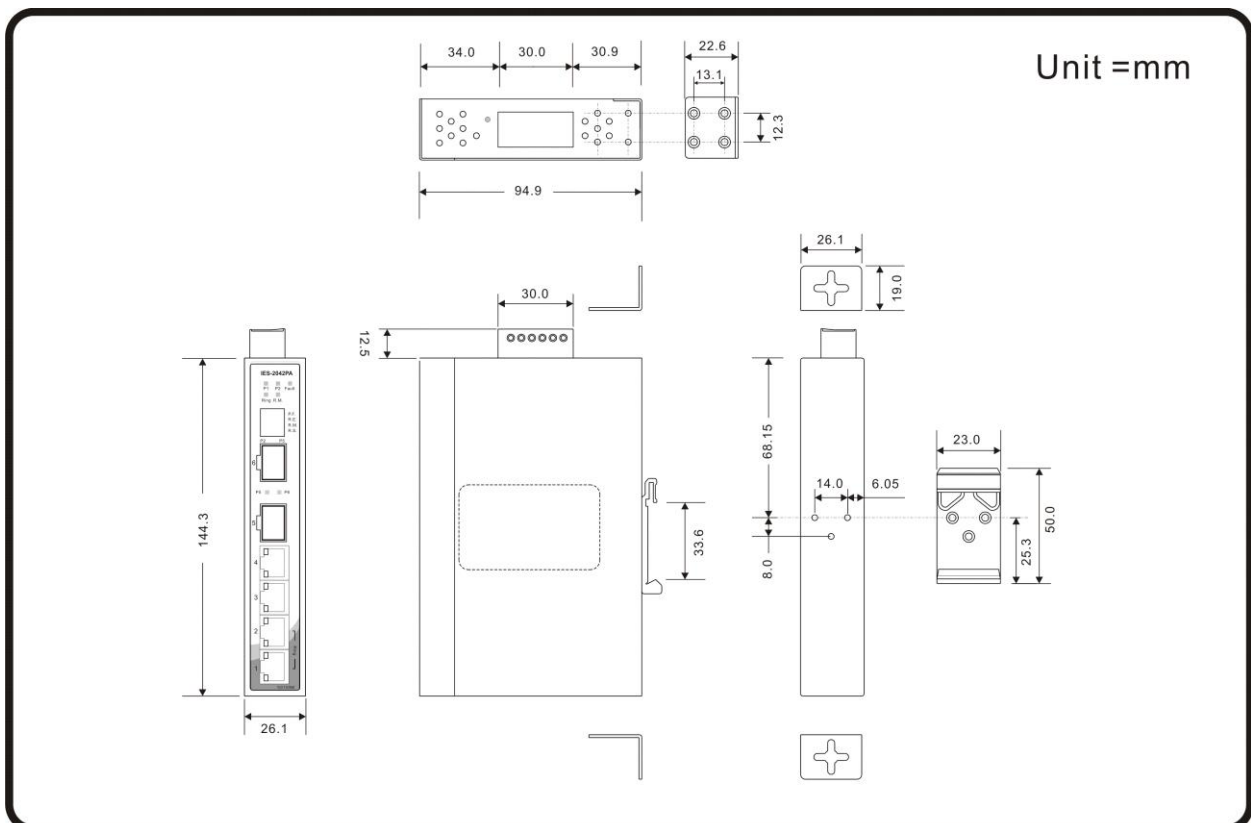


Topology View



Monitoring and Configuration interface

Dimension



Specifications

| ORing Switch Model | IES-2042PA |
|---|---|
| Physical Ports | |
| 10/100 Base-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 : Indicate system operated in O-Ring Master mode |
| O-Ring Indicator | Green : Indicate port operated in O-Ring mode |
| Fault Indicator | Amber : Indicate unexpected event occurred |
| Fault Contact | |
| Relay | Relay output to carry capacity of 1A at 24VDC |
| Power | |
| Input Power | 12~ 48 VDC power inputs on 6-pin terminal block |
| Power Consumption (Typ.) | 7 Watts max |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Present |
| Physical Characteristic | |
| Enclosure | IP-30 |

| | |
|-----------------------------|--|
| Dimension (W x D x H) | 26.1 mm (W) x 95 mm(D) x 144.3(H) mm |
| 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 | |
| EMC | CE EMC(EN55024, EN55032), FCC Part 15 B |
| EMI | EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, Part 15 B class A |
| EMS | EN 55024 (IEC/EN 61000-4-2(ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT), IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8(PFMF), IEC/EN 61000-4-11(DIP)) |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-31 |
| Vibration | IEC60068-2-6 |
| Safety | EN60950-1 |
| MTBF | 1,411,650 hrs |
| Warranty | 5 years |

Ordering Information

IES-2AABCA

| Code Definition | 10/100Base-T(X) Port Number | Additional Port Number | Additional Port Type |
|-----------------|-----------------------------|--|---------------------------|
| Option | - 04: 4 ports | - 2: 2 port | - P : 100Base-FX SFP port |
| Available Model | Model Name | Description | |
| | 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 x 1
- ORing Tool CD x 1
- Quick Installation Guide x 1
- DIN-Rail Kit x 1
- Wall-mount Kit x 1

Optional Accessories

- Open-Vision M500 : Powerful Network Management Windows Utility Suit, 500 IP devices
- SFP100 series : 100Mbps SFP optical transceiver
- DR/SDR/DRP Series DIN-Rail power supply

