

# IPS-2042P

➤ **Industrial 6-port lite-managed PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. 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
- RSTP/STP (IEEE 802.1w/D)
- SNMP v1/v2c/v3 support for secured network management
- Configurable by Web-based and Windows utility (**Open-Vision**)
- Support LLDP (Link Layer Discovery Protocol)
- Event notification through Syslog, Email, and SNMP trap.
- Two 100Base-FX SFP port support for long distance connection
- 4 ports support P.S.E. based on IEEE 802.3af standard up to 25 Watts per port
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled



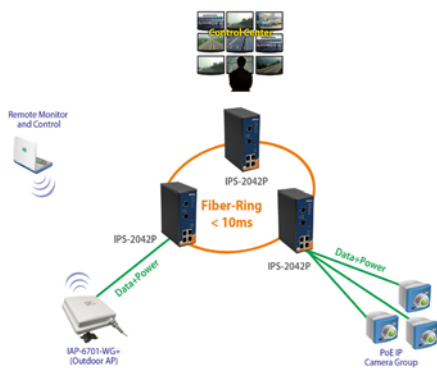
Industrial Ethernet Switch

## Introduction

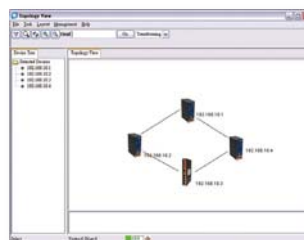
IPS-2042P is a lite-managed redundant ring PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. function and 2x100Base-FX SFP socket. IPS-2042P support Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. IPS-2042P switch has 4x10/100Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE setup. With complete support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection) and Open-Ring/RSTP/STP (IEEE 802.1w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IPS-2042P can be managed centralized and convenient by a powerful windows utility — Open-Vision. The wide operating temperature range from -40 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

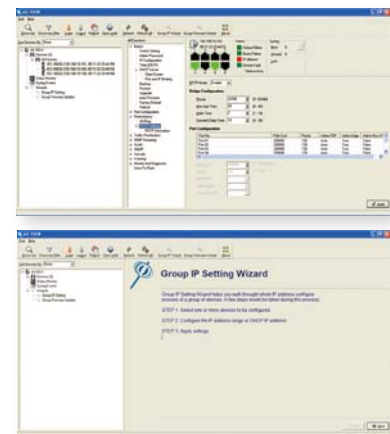
ORing's switches are intelligent switches. Being different from other traditional redundant switches, ORing provides a set of Windows utility (**Open-Vision**) for users to manage and monitor all of industrial Ethernet switches on the industrial networks.



Network connection

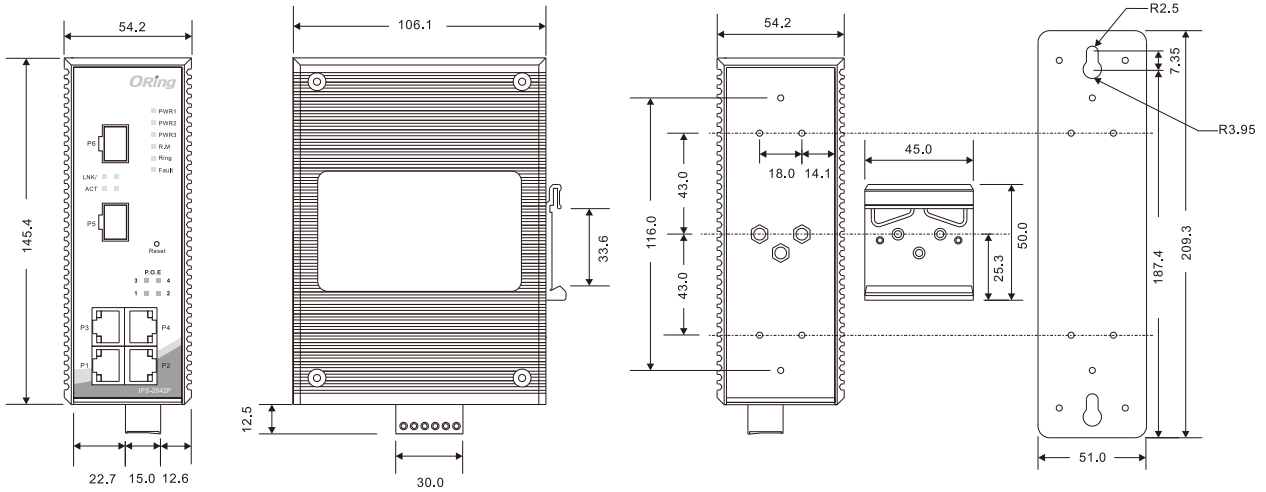


Topology View



Monitoring and Configuration interface

## Dimensions



(Unit=mm)

## PoE Pin Definition

RJ-45 Pin Definition	
Pin No.	Description
#1	TD+
#2	TD-
#3	RD+
#4	PoE Power input +

RJ-45 Pin Definition	
Pin No.	Description
#5	PoE Power input +
#6	RD-
#7	PoE Power input -
#8	PoE Power input -

## Specifications

ORing Switch Model	IPS-2042P
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX with P.S.E.	4
100Base-FX SFP Ports	2
<b>Technology</b>	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100BaseTX 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) IEEE 802.3af PoE specification (up to 25 Watts per port for P.S.E.)
MAC Table	2048 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 SNMPv3 encrypted authentication and access security
Software Features	STP/RSTP (IEEE 802.1D/w) Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units Open-Ring support the other vendor's ring technology in open architecture Port configuration, status, statistics, monitoring, security DHCP Client

Network Redundancy	O-Ring STP    Open-Ring RSTP    Fast recovery
<b>LED Indicators</b>	
Power/PoE Indicator	Green : Power LED x 3.    Green : PoE LED x 4
R.M. Indicator	Green : Indicates that the system is operating in O-Ring Master mode
O-Ring Indicator	Green : Indicates that the system is operating in O-Ring mode
Fault Indicator	Amber : Indicates unexpected event occurred
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act.    Amber for Link
SFP Socket Indicator	Green for port Link/Act.
<b>Fault contact</b>	
Relay	Relay output to carry capacity of 1A at 24VDC
<b>Power</b>	
Redundant Input Power	Triple DC inputs. 2x48VDC on 7-pin terminal block , 1x48VDC on power jack
Power Consumption (Typ.)	7 Watts Max.
Overload Current Protection	Present
Reverse Polarity Protection	Present on terminal block
<b>Physical Characteristics</b>	
Enclosure	IP-30
Dimensions (W x D x H)	54.2(W) x 106.1(D) x 145.4(H) mm (2.13x4.18x5.72 inch.)
Weight (g)	700 g
<b>Environmental</b>	
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
<b>Regulatory Approvals</b>	
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

IPS-2 AA B C

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

Available Model	Model Name	Description
	IPS-2042P	Industrial 6-port lite-managed PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX, SFP socket

**Packing List**

- IPS-2042P
- 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
- SFP100 series, 100Mbps SFP optical transceiver
- DR-75-48, 75W DIN-Rail power supply
- DR-120-48, 120W DIN-Rail power supply
- PAA-482500, 48VDC/2500mA 120W Power Adapter with universal 100 to 240VAC input, US power cord
- PAE-482500, 48VDC/2500mA 120W Power Adapter with universal 100 to 240VAC input, EU power cord