



# IPS-1042FX-24V Series

## Industrial 6-port unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX, 24VDC power input

### Features

- IPS-1042FX-24V series provide 4x10/100Base-T(X) PoE (P.S.E.) and 2x100Base-FX single/multi-mode fiber ports
- Supports IEEE 802.3at compliant 30Watts PoE per port
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control
- Support surge protection technology
- Warning system by relay output
- Slim type rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

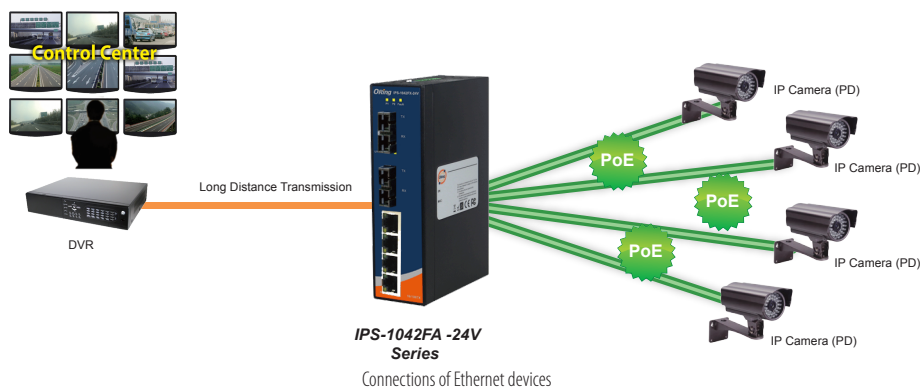


### Introduction

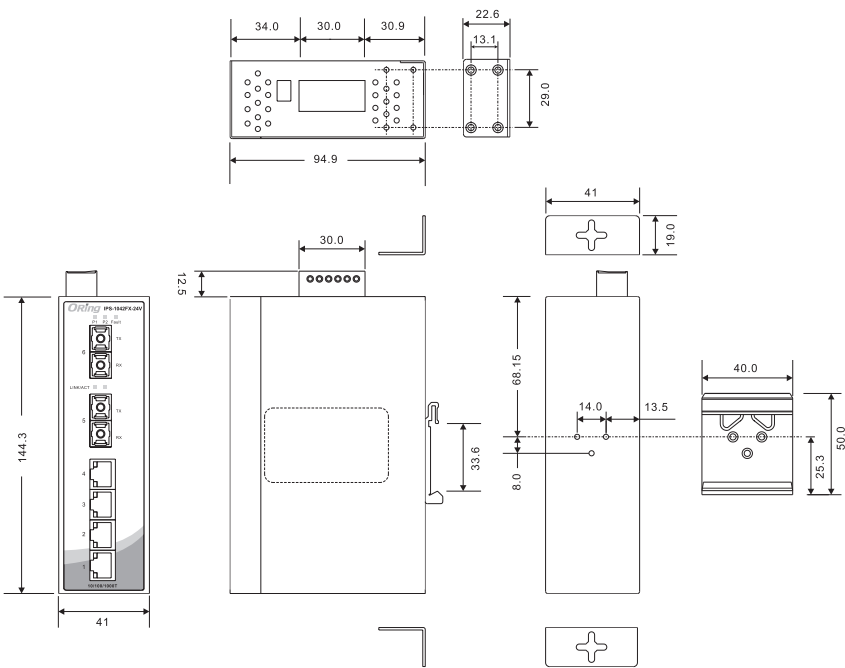
IPS-1042FX-24V series are unmanaged PoE Ethernet switches with 4 x 10/100Base-T(X) P.S.E. and 2x100Base-FX ports. IPS-1042FX-24V series supports Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. IPS-1042FX-24V series 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. IPS-1042FX-24V series support redundant power inputs, configurable relay output alarm and rigid IP-30 housing. In addition, the wide operating temperature range from -40 to 70°C can satisfy most of operating environment.

### Practical Operation

IPS-1042FX-24V series can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, there are two different power inputs at terminal block to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.



Dimensions



(Unit=mm)

PoE Pin Assignment

10/100Base-T(X) P.S.E. RJ-45 Port	
RJ-45 Pin Definition	
Pin No.	Description
#1	TD+ with PoE Power input +
#2	TD- with PoE Power input +
#3	RD+ with PoE Power input -
#6	RD- with PoE Power input -

Specifications

ORing Switch Model		IIPS-1042FX-MM-SC-24V	IPS-1042FX-SS-SC-24V
Physical Ports			
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX with P.S.E.		4	4
Fiber Ports Specifications	Fiber Ports Number	2	2
	Fiber Ports standard	100Base-FX	100Base-FX
	Fiber Mode	Multi-mode	Single-mode
	Fiber Diameter (μm)	62.5/125 μm & 50/125 μm	9/125 μm
	Fiber Optical Connector	SC	SC
	Typical Distance (km)	2 km	30 km
	Wavelength (nm)	1310 nm	1310 nm

ORing Switch Model		IPS-1042FA-MM-SC	IPS-1042FA-SS-SC
Fiber Ports Specifications	Max. Output Optical Power (dBm)	-14 dBm	-8 dBm
	Min. Output Optical Power (dBm)	-23.5 dBm	-15 dBm
	Max. Input Optical Power (Saturation)	0 dBm	0 dBm
	Min. Input Optical Power(Sensitivity)	-31 dBm	-34 dBm
	Link Budget (dB)	7.5 dB	19 dB
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 802.3at PoE specification	
MAC Table		2048 MAC addresses	
Processing		Store-and-Forward	
LED Indicators			
Power Indicator		Green : Power LED x 2	
Fault Indicator		Amber : Indicate PWR1 or PWR2 failure	
10/100Base-T(X) RJ45 Port Indicator		Green for port Link/Act. Green for PoE power injected.	
100Base-FX Fiber Port Indicator		Green for port Link/Act.	
Fault contact			
Relay		Relay output to carry capacity of 1A at 24VDC	
Power			
Redundant Input Power		Dual DC inputs. 24~36VDC on 6-pin terminal block.	
Power Consumption (Typ.)		6.48 Watts (power consumption of P.S.E. is not included)	5.4 Watts (power consumption of P.S.E. is not included)
Overload Current Protection		Present	
Reverse Polarity Protection		NOT Present	
Physical Characteristics			
Enclosure		IP-30	
Dimensions (W x D x H)		41 (W) x 144.3 (H) x 94.9 (D) mm (1.61 x 5.68 x 3.74 inch)	
Weight (g)		530 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	
Warranty		5 years	

## Ordering Information

IPS-1 AA B CC -DD-EE -24V

Code Definition	10/100Base-T(X) P.S.E. Port Number	Additional Port Number	Additional Port Type	Fiber Optical Mode	Fiber Optical Connector
Option	- <b>04</b> : 4 ports	- <b>2</b> : 2 ports	- <b>FA</b> : 100 Base-FX	- <b>MM</b> : Multi-mode - <b>SS</b> : Single-mode	- <b>SC</b> : SC connector

Available Model	Model Name	Description
	IPS-1042FX-MM-SC-24V	Industrial 6-port unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX, multi-mode, 2Km/1310nm, SC connector, 24VDC power input
	IPS-1042FX-SS-SC-24V	Industrial 6-port unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX, single-mode, 30Km/1310nm, SC connector, 24VDC power input
<b>Packing List</b> <ul style="list-style-type: none"> <li>IPS-1042FX-MM/SS-24V</li> <li>DIN-Rail Kit</li> <li>Wall-mount Kit</li> <li>Quick Installation Guide</li> </ul>		<b>Optional Accessories (Can be purchased separately)</b> <ul style="list-style-type: none"> <li>DR-45-24 : 45 Watts@24VDC DIN-Rail power supply</li> <li>DR-75-24 : 75 Watts@24VDC DIN-Rail power supply</li> <li>DR-120-24 : 120 Watts@24VDC DIN-Rail power supply</li> </ul>

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ORing:

[IPS-1042FX-MM-SC-24V](#) [IPS-1042FX-SS-SC-24V](#)