IPS-1042FA Series

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❯ *Industrial 6-port slim type unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX*

Features

- IPS-1042FA 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
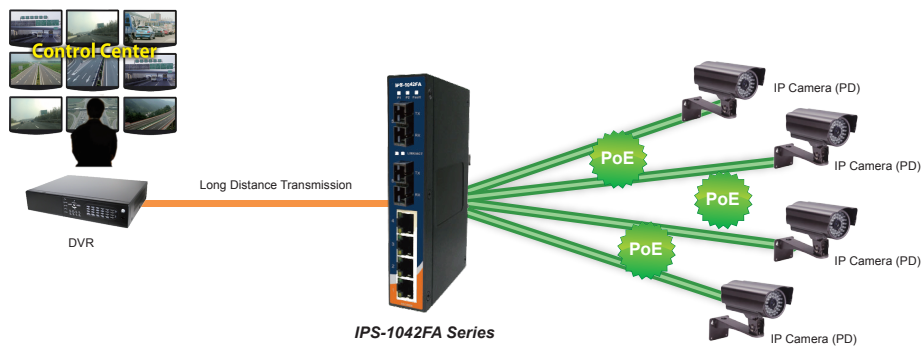- DIN-Rail and wall mounting enabled

Introduction

IPS-1042FA series are unmanaged PoE Ethernet switches with 4 x 10/100Base-T(X) P.S.E. and 2x100Base-FX ports. IPS-1042FA 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-1042FA 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-1042FA 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.
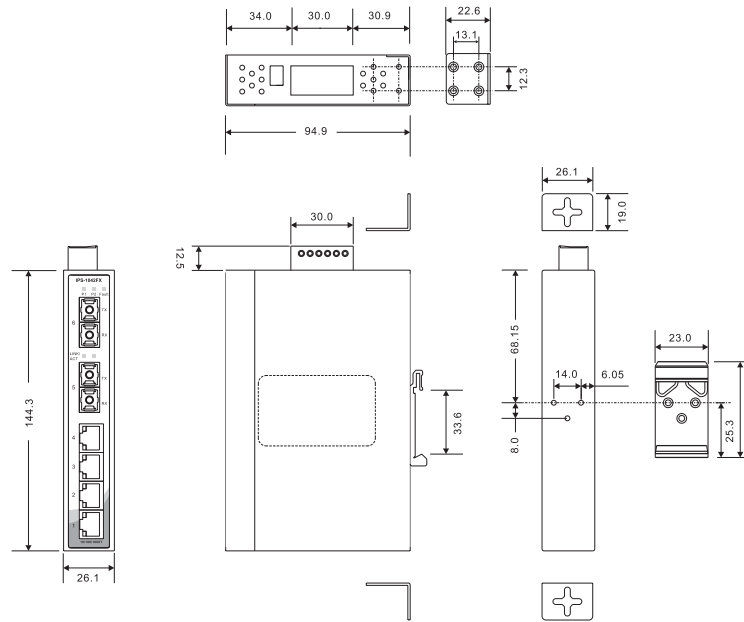
Practical Operation

IPS-1042FA 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.

Connections of Ethernet devices

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		IPS-1042FA-MM-SC	IPS-1042FA-SS-SC
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

Industrial
Ethernet Switch

Industrial
Media Converter

Industrial
Device Server

Industrial Wireless
Access Point

Industrial Cellular
VPN Router

Industrial
M2M Gateway

Accessories

Network
Management Software

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. 50~57VDC on 6-pin terminal block.	
Power Consumption (Typ.)	6.78 Watts (power consumption of P.S.E. is not included)	5.6 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)	26.1(W) x 94.9(D) x 144.3(H) mm (1.03 x 3.74 x 5.68 inch.)
Weight (g)	395 g

Environmental	
Storage Temperature	-40 to 85℃ (-40 to 185℉)
Operating Temperature	-40 to 70℃ (-40 to 158℉)
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

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

	Model Name	Description
Available Model	IPS-1042FA-MM-SC	Industrial 6-port slim type unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX, multi-mode, 2Km/1310nm, SC connector
	IPS-1042FA-SS-SC	Industrial 6-port slim type unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 2x100Base-FX, single-mode, 30Km/1310nm, SC connector

Packing List
- IPS-1042FA
- DIN-Rail Kit
- Wall-mount Kit
- Quick Installation Guide

Optional Accessories (Can be purchased separately)
- DR-75-48 : 75 Watts@48VDC DIN-Rail power supply
- DR-120-48 : 120 Watts@48VDC DIN-Rail power supply
- SDR-240-48 : 240 Watts@48VDC DIN-Rail power supply
- SDR-480-48 : 480 Watts@48VDC DIN-Rail power supply

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Network Management Software

ORing Designed for Rugged Excellence