IES-162FX-L Series

1

Industrial Ethernet Switch

▶ *Industrial 8-port unmanaged Ethernet switch with 6x10/100Base-T(X) and 2x100Base-FX*

Features

- Support 6x10/100Base-T(X) and 2x100Base-FX single/multi-mode fiber ports
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control
- Support broadcast storm protection
- Compact size for easily installation
- Support operating temperature from -20 to 60°C
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

-20~60°C
Temperature
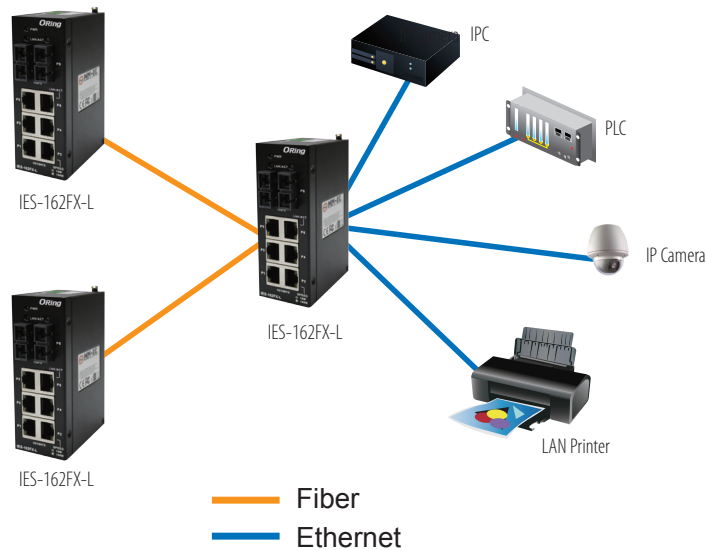
RoHS Lead Free CE FC

Introduction

IES-162FX-L series are unmanaged Ethernet switches with 6 x 10/100Base-T(X) and 2 x 100Base-FX ports. With very compact size of housing, you can install IES-162FX-L series easily. In addition, IES-162FX-L series are with rigid IP-30 housing design and can operate under harsh environment. The extended operating temperature range from -20 oC to 60oC is ready and can satisfy most requirement of operation.
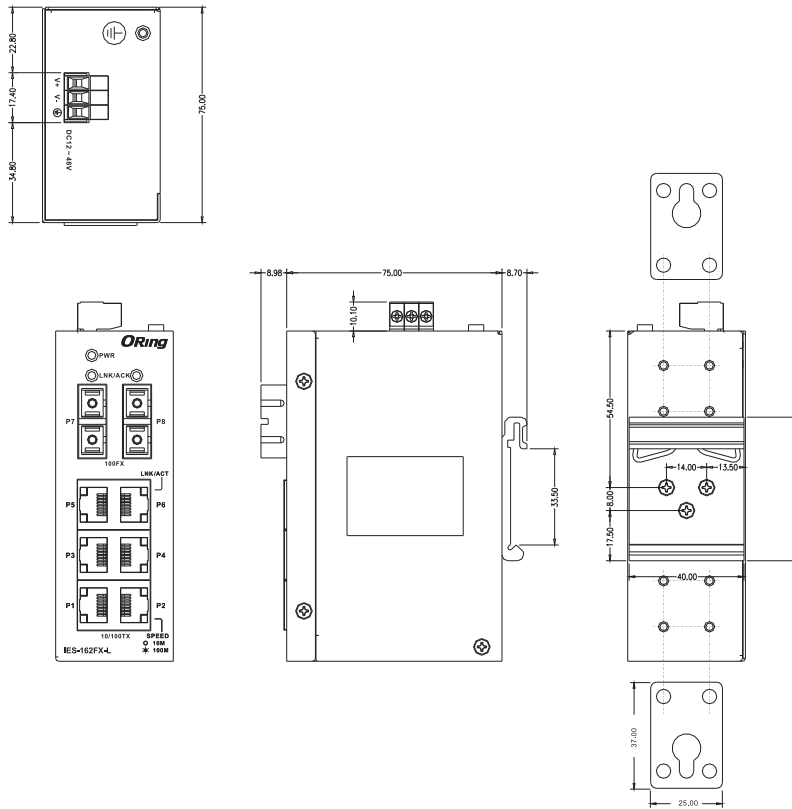
Practical Operation

IES-162FX-L series can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, its mini size enables easily installation and minimize space requirement.

IES-162FX-L

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IPC

PLC

IP Camera

LAN Printer

— Fiber
— Ethernet

Connections of Ethernet devices

Dimensions

(Unit=mm)

Specifications

ORing Switch Model	IES-162FX-MM-SC-L	IES-162FX-SS-SC-L
Physical Ports		
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	6	6
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
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	
MAC Table	1024 MAC addresses	
Packet Buffer	448Kbits	
Processing	Store-and-Forward	

The leftmost column of the fiber rows reads vertically: **Fiber Ports Specification**

Side tabs (vertical):
- Industrial Ethernet Switch
- Industrial Media Converter
- Industrial Device Server
- Industrial Wireless Access Point
- Industrial Cellular VPN Router
- Industrial M2M Gateway
- Accessories
- Network Management Software

LED indicators	
Power Indicator	Green : Power LED x 1
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for speed indicator – Amber for 100Mbps, off-light for 10Mbps
100Base-FX Fiber Port Indicator	Green for port Link/Act.

Power		
Power Input	10~30VDC on 3-pin terminal block.	
Power Consumption (Typ.)	3.6 watts max.	3.6 watts max.
Overload Current Protection	Present	
Reverse Polarity Protection	Present	

Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	41 x 83.98 x 115 mm (1.61 x 3.31 x 4.53 inch)	
Weight (g)	328 g	328 g

Environmental	
Storage Temperature	–40 to 85°C (-40 to 185°F)
Operating Temperature	-20 to 60°C (-4 to 140°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

IES-1 A B CC - DD - EE -L

Code efinition	10/100Base-T(X) Port Number	Additional Port Type	Additional Port Number	Fiber Optical Mode	Fiber Optical Connector
Option	**- 6:** 6 ports	**- 2:** 2 ports	**- FX:** 100Base-FX	**- MM: Multi-mode** **- SS: Single-mode**	**- SC: SC connector**

	Model Name	Descripn
Available Model	IES-162FX-MM-SC-L	Industrial 8-port unmanaged Ethernet switch with 6x10/100Base-T(X) and 2x100Base-FX, multi-mode, 2Km/1310nm, SC connector
	IES-162FX-SS-SC-L	Industrial 8-port unmanaged Ethernet switch with 6x10/100Base-T(X) and 2x100Base-FX, single-mode, 30Km/1310nm, SC connector

Packing List
- IES-162FX-MM/SS-SC-L x 1
- Din-Rail Kit x 1
- Wall-mount Kit x 1
- Quick Installation Guide x 1

Optional Accessories
- DR-45 series : 45 Watts Din-Rail power supply
- DR-75 series : 75 Watts Din-Rail power supply
- DR-120 series : 120 Watts Din-Rail power supply