



IES-162FX-L Series

➤ **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

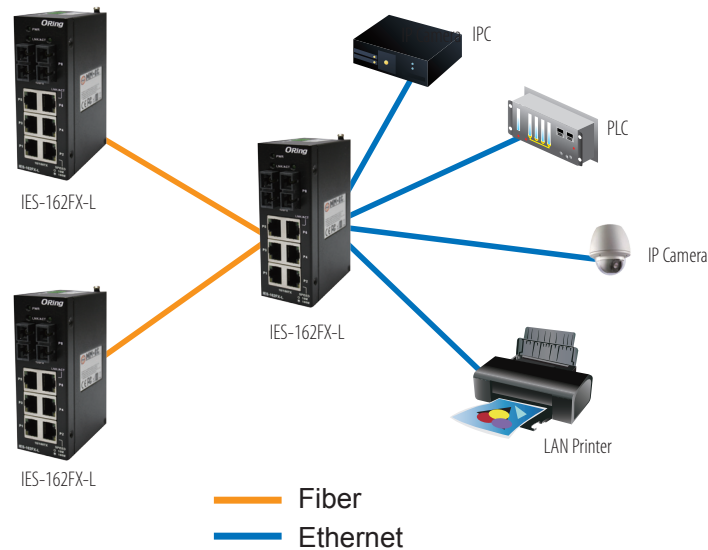


Introduction

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.



Connections of Ethernet devices

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

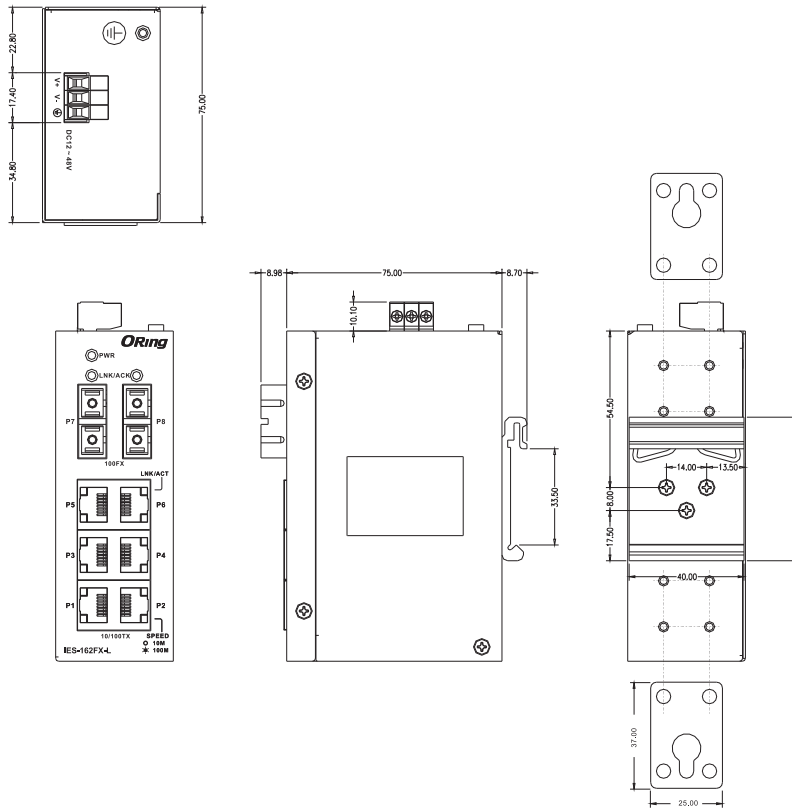
Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software

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		6	6
Auto MDI/MDIX			
Fiber Ports Specification	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		

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 efnition	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

Available Model	Model Name	Descripn
	IES-162FX-MM-SS-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		Optional Accessories
<ul style="list-style-type: none"> IES-162FX-MM/SS-SC-L x 1 Din-Rail Kit x 1 Wall-mount Kit x 1 Quick Installation Guide x 1 		<ul style="list-style-type: none"> 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

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