

# IES-162FX-L Series



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

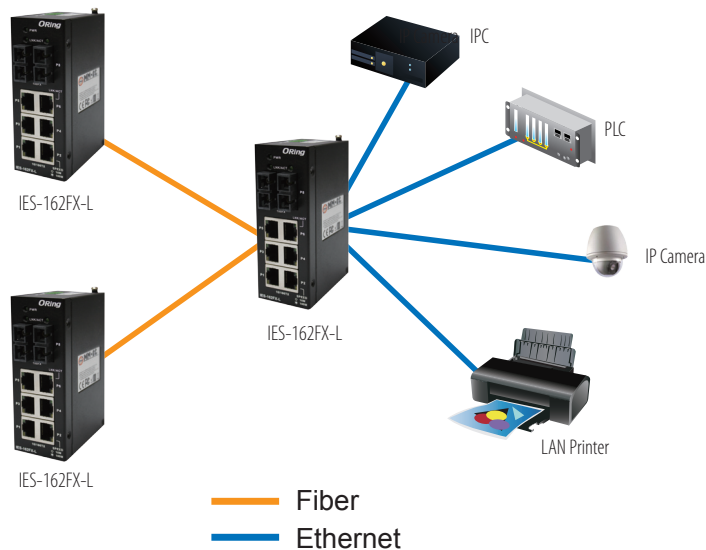


### Introduction

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.

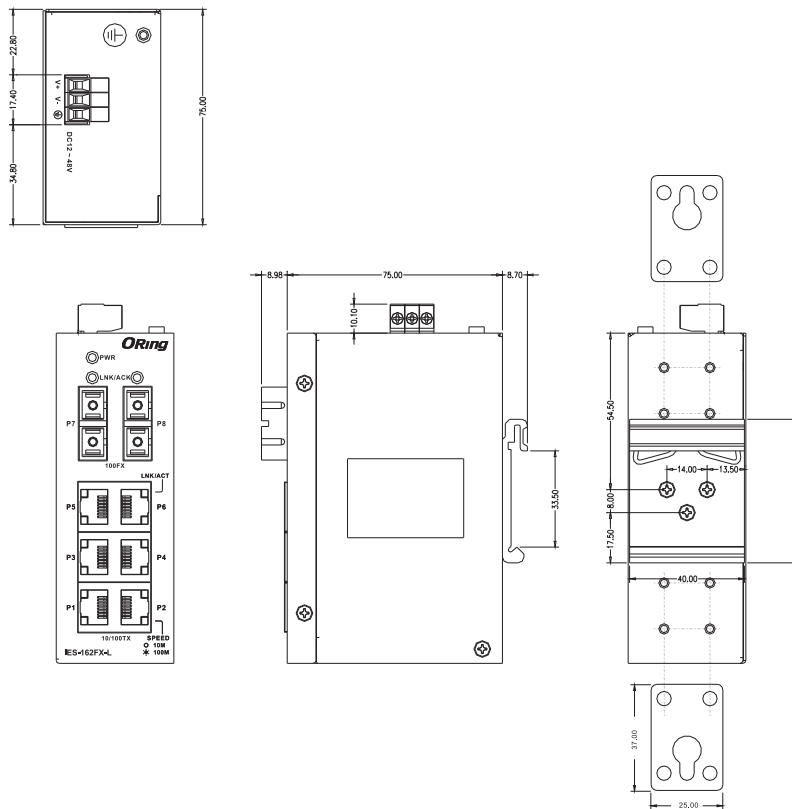
### Practical Operation

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

## Dimensions



(Unit=mm)

## Specifications

ORing Switch Model		IES-162FX-MM-SC-L	IES-162FX-SS-SC-L
<b>Physical Ports</b>			
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX		<b>6</b>	<b>6</b>
Fiber Ports Specification	Fiber Ports Number	<b>2</b>	<b>2</b>
	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	
<b>Technology</b>			
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
<b>Option</b>	- <b>6</b> : 6 ports	- <b>2</b> : 2 ports	- <b>FX</b> : 100Base-FX	- <b>MM</b> : Multi-mode - <b>SS</b> : Single-mode	- <b>SC</b> : 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