

IES-162FX-L series



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➤ **Industrial 8-port Unmanaged Ethernet Switch with 6x10/100Base-T(X) and 2x100Base-FX**

Features

- Support 6 ports 10/100Base-T(X) ports
- Support 2 x 100Base-FX single/multi-mode fiber ports
- Support auto-negotiation and auto-MDI/MID-X
- Support Store and forward transmission
- Support flow control
- Rigid IP-30 housing design
- DIN-rail and wall mounting enable



Introduction

IES-162FX-L series is unmanaged Ethernet Switch with 6x10/100Base-T(X) with 2x100Base-FX ports and extended operating temperature range from -40°C to 75°C for the harsh environments. IES-162FX-L series are with rigid IP-30 housing design and can operate under harsh environment.

Specifications

ORing Switch Model		IES-162FX-MM-SC-L	IES-162FX-SS-SC-L
Physical Ports			
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX		6	
Fiber Ports Specification	Fiber Ports Number	2	2
	Fiber Ports Standard	100Base-FX	100Base-FX
	Fiber Mode	Multi-Mode	Single-Mode
	Fiber Diameter(um)	62.5/125 um & 50/125 um	9/125 um
	Fiber Optical Connector	SC	SC
	Typical Distance(Km)	2Km	30Km
	Wavelength(nm)	1310nm	1310nm
	Max. Output Optical Power(dBm)	-14dbm	-8dbm
	Min. Output Optical Power(dBm)	-23.5dbm	-15dbm
	Max. Input Optical Power(Saturation)	0dbm	0dbm
	Min. Input Optical Power(Sensitivity)	-31dbm	-34dbm
	Link Budget(db)	7.5db	19db
Technology			
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow control		
MAC Table	1K		
Packet buffer	448K bits		
Processing	Store-and-Forward		
Switch Properties	Switching latency: 7 us Switching bandwidth: 1.6Gbps Throughput (packet per second) : 1.19Mpps@64Bytes packet		
LED indicators			
Power Indicator (PWR)	Green: Power LED x 1		
10/100Base-T(X) RJ45 Port Indicator	Upper LED for Link/Act indicator: Green for port Link/Act Lower LED for speed indicator, Amber for 100Mbps, off for 10Mbps		
100Base-FX Fiber port Indicator	Green for port Link/Act		
Power			
Redundant Input power	Dual 10~30VDC on 3-pin terminal block		
Power consumption (Typ.)	<4.1W, 0.41A-0.13A		<3.2W, 0.32A-0.10A
Overload current protection	Present		
Reverse Polarity Protection	Present		
Physical Characteristic			
Enclosure	IP-30 Metal		
Dimension (W x D x H)	41 (W) x 83.98 (D) x 115 (H)mm 1.61 (W) x 3.31 (D) x 4.53 (H) inch		
Weight (g)	328 g		
Hardware Version	V1.0		

Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 75°C (-40 to 167°F)	
Operating Humidity	5% to 95% Non-condensing	
Regulatory approvals		
EMC	CE EMC (EN 55024, EN 55032), FCC Part 15 B	
EMI	EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15 B class A	
EMS	EN 55024 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Surge: Power 0.5KV, Signal 1KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))	
Shock	IEC60068-2-27	
Free Fall	IEC60068-2-31	
Vibration	IEC60068-2-6	
Safety	EN 60950-1 (LVD), UL61010-1, UL61010-2-201	
MTBF	1,218,117hrs	1,060,513hrs
Warranty	5 years	

Ordering Information

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

Code Definition	10/100Base-T(X) P.S.E Port Number	Additional Port Number	Additional Port Type	Fiber Optical Mode	Fiber Optical Connector
Option	-6: 6 ports	-2: 2 port	-FX: 100Base-FX	-MM: Multi-Mode -SS: Single-Mode	-SC: SC Connector

Available Model	Model Name	Description
	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 2 - Quick Installation Guide x 1		Optional Accessories DR/SDR/DRP Series DIN-Rail power supply