# IES-1041FX / 1042FX Series





### ▶ Industrial slim type 5-port/6-port unmanaged Ethernet switch

#### **Features**

- IES-1041FX series provide 4x10/100Base-T(X) and 1x100Base-FX single/multi-mode fiber ports
- IES-1042FX series provide 4x10/100Base-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 surge protection technology
- Warning system by relay output
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled













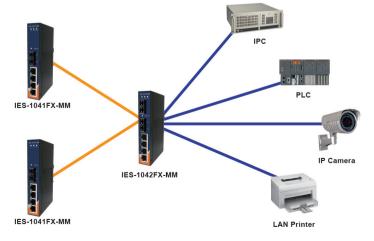


#### Introduction

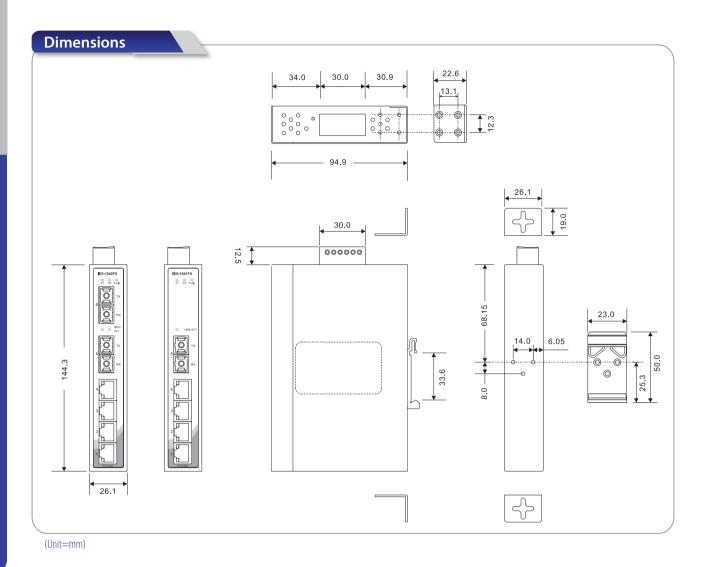
IES-1041FX/1042FX series are unmanaged Ethernet switches with 4 x 10/100Base-T(X) and 100Base-FX ports. IES-1041FX/1042FX series support redundant power inputs, configurable relay output alarm and rigid IP-30 housing. In addition, the wide operating temperature range from -40 to 70°C can satisfy most of operating environment.

#### **Practical Operation**

IES-1041FX/1042FX 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 quarantee a non-stop operation.



Connections of Ethernet devices

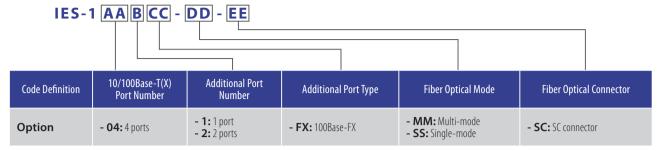


## Specifications

ORing Switch Model		IES-1041FX-MM-SC	IES-1041FX-SS-SC	IES-1042FX-MM-SC	IES-1042FX-SS-SC	
Physical Ports						
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX		4	4	4	4	
Fiber Ports Specifications	Fiber Ports Number	1	1	2	2	
	Fiber Ports Standard	100Base-FX	100Base-FX	100Base-FX	100Base-FX	
	Fiber Mode	Multi-mode	Single-mode	Multi-mode	Single-mode	
	Fiber Diameter (µm)	62.5/125 μm 50/125 μm	9/125 μm	62.5/125 μm 50/125 μm	9/125 μm	
	Fiber Optical Connector	SC	SC	SC	SC	
	Typical Distance (km)	2 km	30 km	2 km	30 km	
	Wavelength (nm)	1310 nm	1310 nm	1310 nm	1310 nm	
	Max. Output Optical Power (dBm)	-14 dBm	-8 dBm	-14 dBm	-8 dBm	
	Min. Output Optical Power (dBm)	-23.5 dBm	-15 dBm	-23.5 dBm	-15 dBm	
	Max. Input Optical Power (Saturation)	0 dBm	0 dBm	0 dBm	0 dBm	
	Min. Input Optical Power (Sensitivity)	-31 dBm	-34 dBm	-31 dBm	-34 dBm	
	Link Budget (dB)	7.5 dB	19 dB	7.5 dB	19 dB	

Technology	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	2048 MAC addresses					
Processing	Store-and-Forward					
LED Indicators						
Power Indicator	Green: Power LED x 2					
Fault Indicator	Amber : Indicates PWR1 or PWR2 failure occurred					
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for Duplex/Collision					
Fiber Port LED	Green for port Link/Act.					
Fault contact						
Relay	Relay output to carry capacity of 1A at 24VDC					
Power						
Redundant Input Power	Dual DC inputs: 12~48VDC on 6-pin terminal block					
Power Consumption (Typ.)	5 Watts	7 Watts				
Overload Current Protection	Present					
Reverse Polarity Protection	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)	378 g	382 g				
Environmental						
Storage Temperature	-40 to 85°C (-40 to 185°F)					
Operating Temperature	-40 to 70°C (-40 to 158°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**



	Model Name	Description	
Available Model	IES-1041FX-MM-SC	Industrial 5-port slim type unmanaged Ethernet switch with 4x10/100Base-T(X) and 1x100Base-FX, multi-mode, 2km/1310nm, SC connector	
	IES-1041FX-SS-SC	Industrial 5-port slim type unmanaged Ethernet switch with 4x10/100Base-T(X) and 1x100Base-FX, single-mode, 30km/1310nm, SC connector	
	IES-1042FX-MM-SC	Industrial 6-port slim type unmanaged Ethernet switch with 4x10/100Base-T(X) and 2x100Base-FX, multi-mode, 2km/1310nm, SC connector	
	IES-1042FX-SS-SC	Industrial 6-port slim type unmanaged Ethernet switch with 4x10/100Base–T(X) and 2x100Base–FX, single-mode, 30km/1310nm, SC connector	
Packing List  • IES-1041FX / 1042FX  • DIN-Rail Kit  • Wall-mount Kit  • Quick Installation Guide		Optional Accessories (Can be purchased separately)  • DR-45 series, 45W DIN-Rail power supply  • DR-75 series, 75W DIN-Rail power supply  • DR-120 series, 120W DIN-Rail power supply  • SDR-240-48, 240W DIN-Rail power supply  • SDR-480-48, 480W DIN-Rail power supply	