

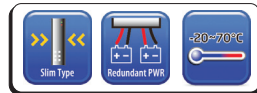
Quick Installation Guide

IBS-102FX

Industrial Optical Bypass Switch

Introduction

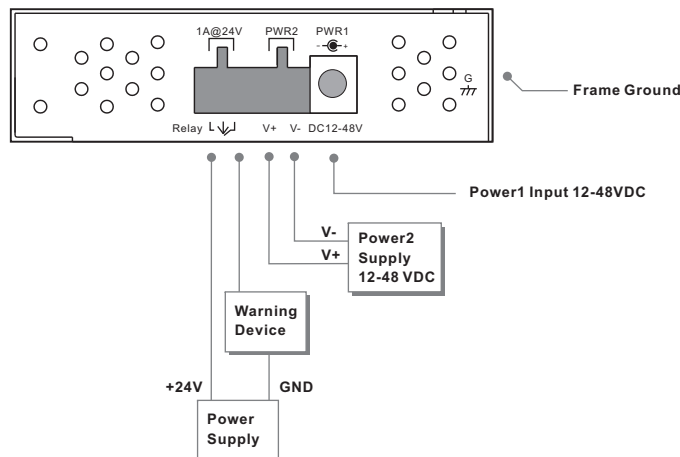
IBS-102FX Series is an external Bypass switch for 100M/1G/10G fiber optical networks. This fiber optical bypass switch protects from network failures and Network maintenance by ensuring network integrity during power loss. This fiber optical bypass switch includes Network ports and Monitor ports. The Network ports are used to connect to main-network connections and provide protection mechanism and the Monitor ports are used for down-link local networking device. When power is on, the mode of the Bypass switch is in Normal operation mode and the local networking device is connected with main-network. When on the power failure state, the Bypass switch is set to bypass mode to isolate the main-network from the local networking device.



Features

- > Support 100M/1G/10G optical bypass function of 2 port duplex or 4 port simplex fiber connection
- > Different model supported for multi-mode or single-mode optical fiber
- > Low insertions loss
- > Throughput not affected and no extra delay
- > Bypass switching time <10ms
- > Dual Wide range power inputs: 12~48VDC
- > Relay output for pwer failed warning
- > Rigid IP-30 housing design
- > DIN-Rail and wall mounting enabled

Power Connection Guide



Specifications

ORing Bypass Switch Model	IBS-102FX-SS-LC	IBS-102FX-MM-LC
Physical Ports		
LC connector	4 Duplex Single-mode LC connector	4 Duplex Multi-mode LC connector
Fiber Ethernet		
Optical Fiber	Single-mode: 9/125µm	Multi-mode: 50/125µm or 62.5/125µm
Operating Wavelength	1260 ~ 1570 nm	780 ~ 1350 nm
Insert loss	typical1.2 dB, Maximun 1.6 dB	< 1.0 dB
Switching time	< 10ms	
DIP Switch Setting		
DIP-Switch No.1	Power-1 failed warning detection: (On) relay enabled (Off) relay disabled	
DIP-Switch No.2	Power-2 failed warning detection: (On) relay enabled (Off) relay disabled	
LED Indicators		
Power indicator	Green : power LED x 2.	
Normal indicator	Green On : Operated in normal mode	
Fault Indicator	Amber for power failed indicator	
Fault contact		
Relay	Relay output to carry capacity of 1A at 24 VDC	
Power		
Input power	Dual 12~48 VDC power inputs at DC-Jack and 4-pin terminal block	
Power consumption (Typ.)	2.7 Watts	
Overload current protection	Present	
Reverse Polarity	Present on Terminal Block	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	26.1(W)x94.9(D)x144.3(H) mm (1.03x3.74x5.68inch.)	
Weight (g)	405g	
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-20 to 70°C (-4 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	
Warranty	1 years	

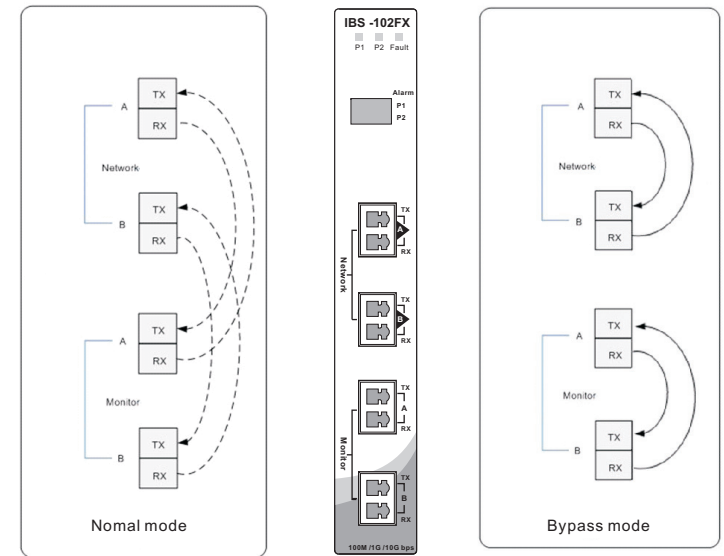
Practical Operation

Normal mode:

The Bypass switch deliver the data between the Network ports and the Monitor (local) ports

Bypass mode:

The Network data traffic routed directly to the other Network port. And the Monitor data traffic routed directly to the other Monitor port.



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RoHS, FC, CE

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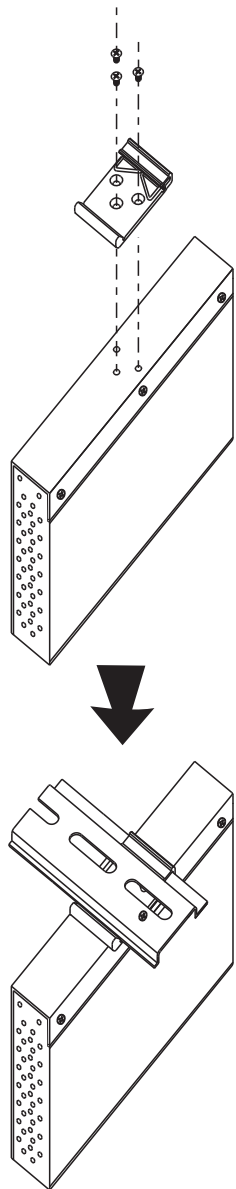
Quick Installation Guide

IBS-102FX

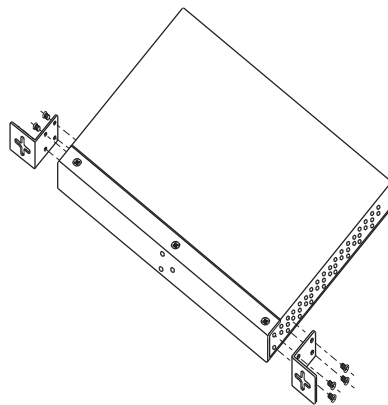
Industrial Optical Bypass Switch

Installation

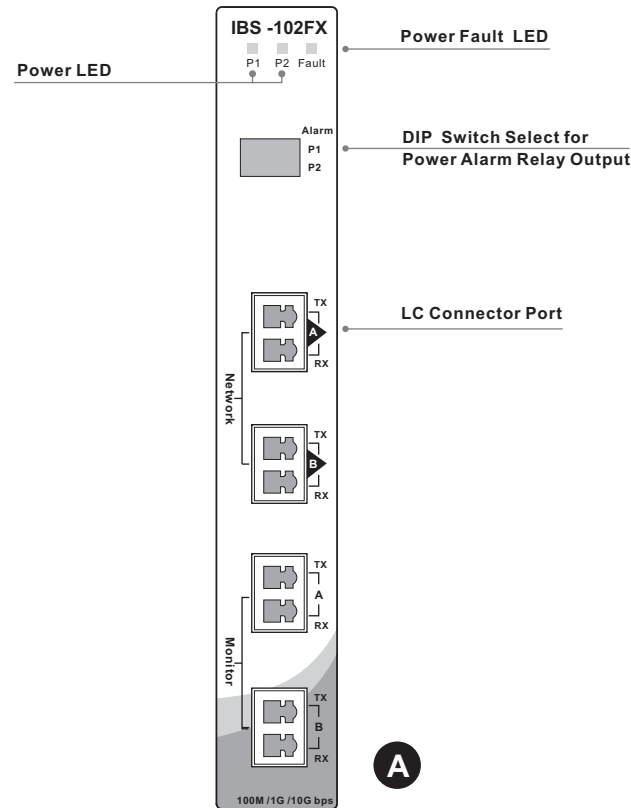
DIN-Rail Install Step



Wall-mounted Install Step



Front Panel

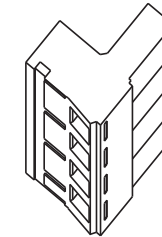


DIP Switch Function

DIP-1	DIP-2	Description
OFF	OFF	Power failure relay alarm disabled
ON	OFF	PWR-1 failure, relay alarm enabled
OFF	ON	PWR-2 failure, relay alarm enabled
ON	ON	PWR-1 or PWR-2 failure, relay alarm enabled

Accessory

① 4-Pin Terminal block



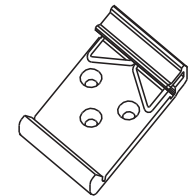
② Round Screw (M3 X3)



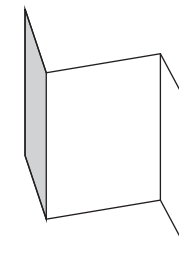
③ Wall-mounted kit (for Slim Type)



④ 25mm DIN-Rail kit



⑤ QIG



Packing list

Model name	Front Panel	Model Description	Accessory
IBS-102FX-MM-LC	A	Industrial 2-port bypass switch for fiber optical network with 4xLC duplex, multi-mode, LC connector	⊙X1, ⊙X8, ⊙X2, ⊙X1, ⊙X1
IBS-102FX-SS-LC	A	Industrial 2-port bypass switch for fiber optical network with 4xLC duplex, single-mode, LC connector	⊙X1, ⊙X8, ⊙X2, ⊙X1, ⊙X1