

## IBP-202

### Optical Fiber Bypass Switch

- ◆ 100M/1G/2.5G/10G Ethernet or Telecom Applications
- ◆ SC/ST/LC SM or MM Optical
- ◆ Optical Bypass Switching Time <10ms
- ◆ Provides Rotary Switch to Set Delay Boot Time (0~180 Seconds)
- ◆ EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC Certified



Industrial-grade fiber optic bypass switches can be installed in 100M/1G/10G fiber optic networks. It protects the network from failures and subsequent maintenance by ensuring the integrity of the network during power outages. When a power failure occurs, the bypass switch is quickly set to bypass mode to isolate the main network from local network equipment. When the power returns to normal, the bypass switch will switch to the normal state and the local network equipment will be connected to the main network. It can be used with a CTCU industrial network switches to ensure non-stop network connectivity.

### Features

- Low insertions loss (<1.5dB)
- Redundant dual DC power input 12/24/48VDC (9.6 ~ 60VDC)
- IP30 rugged metal housing and fanless
- Wide operating temperature -20 ~ 70°C

### Specifications

<b>Fiber Connector</b>	SC, ST, LC
<b>Operating Wavelength</b>	SM: 1260 ~ 1650nm / MM: 810~890nm , 1260~1340nm
<b>Optic Fiber Cable</b>	Single mode: 8/125um~10/125um / Multi mode: 50/125um
<b>Insertion Loss</b>	<1.5dB
<b>Optical Switching Time</b>	< 10ms
<b>LED Indicator</b>	Power 1, Power 2, Operation mode (Normal /Bypass)
<b>Boot Up Delay Adjuster</b>	Provides a rotary switch to configure boot up delay time (0~180 seconds)
<b>Removable Terminal Block</b>	Provide for redundant power
<b>Power Supply</b>	12/24/48VDC (9.6~60VDC), Redundant power with polarity reverse protect function and removable terminal block
<b>Reverse Polarity Protection</b>	Supported for Power Input
<b>Overload Current Protection</b>	Supported
<b>Power Consumption</b>	0.4W (12VDC), 0.5W (24VDC), 0.8W (48VDC)
<b>Housing</b>	Rugged metal, IP30 protection and fanless
<b>Dimensions</b>	106 x 62.5 x 135mm (D x W x H)
<b>Weight</b>	530g (IBP-202-SLC) 545g (IBP-202-SSC, IBP-202-SST)
<b>Installation</b>	DIN Rail mounting or wall mounting (Optional)
<b>Operating Temperature</b>	-20~70°C
<b>Storage Temperature</b>	-40 ~ 85°C
<b>Operating Humidity</b>	5% ~ 95% (Non-condensing)
<b>MTBF</b>	273,054 Hours (MIL-HDBK-217)
<b>Warranty</b>	5 Years

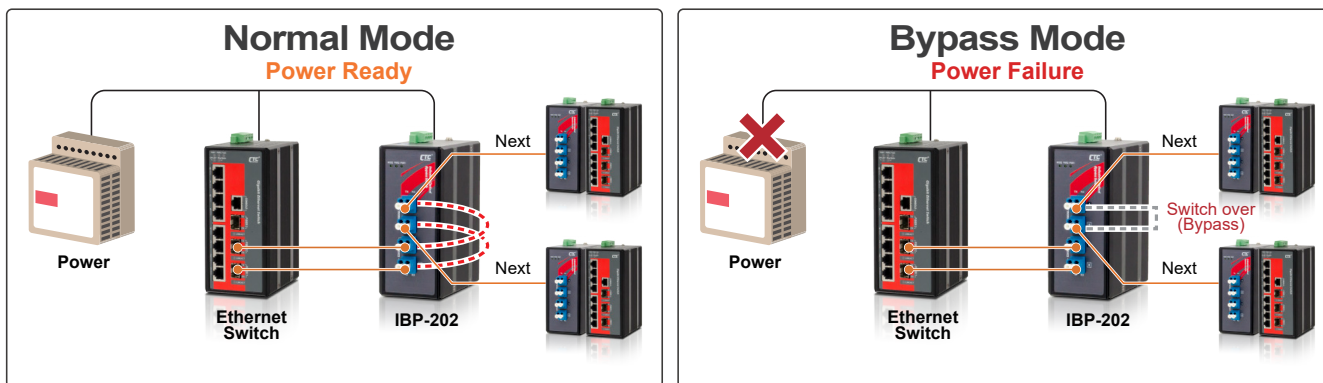
## Certification

EMC	CE (EN55024, EN55032)
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE
Railway Traffic	EN50121-4
Immunity for Heavy Industrial Environment	EN61000-6-2
Emission for Heavy Industrial Environment	EN61000-6-4
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-4-2 (ESD) Level 3, Criteria B
	EN61000-4-3 (RS) Level 3, Criteria A
	EN61000-4-4 (EFT) Level 3, Criteria A
	EN61000-4-5 (Surge) Level 3, Criteria B
	EN61000-4-6 (CS) Level 3, Criteria A
	EN61000-4-8 (PFMF) Field strength 300A/m Criteria A
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

## Application

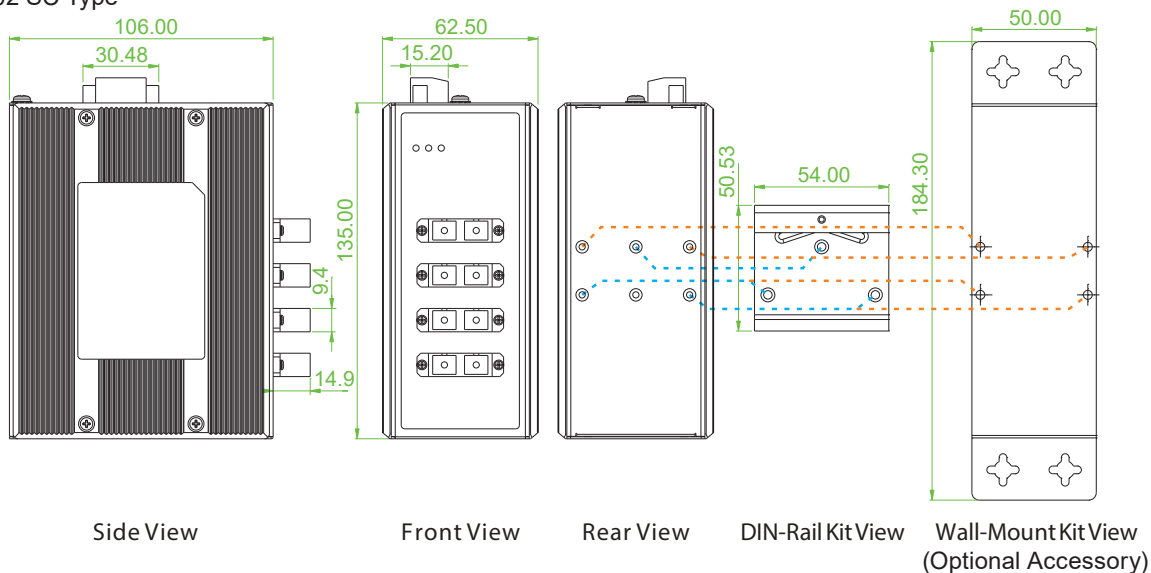
The IBP-202 supports the function of optical path Normal mode and Bypass mode for fiber optical networks. It offers a simple mechanism to switch both of upload and down load fiber path when a power system failure occurs, and a path restores when power back. It offers a simple way to reduce the risk of optical network Node-Down which is caused by the power system.

IBP-202 Data flow in Normal or Bypass mode



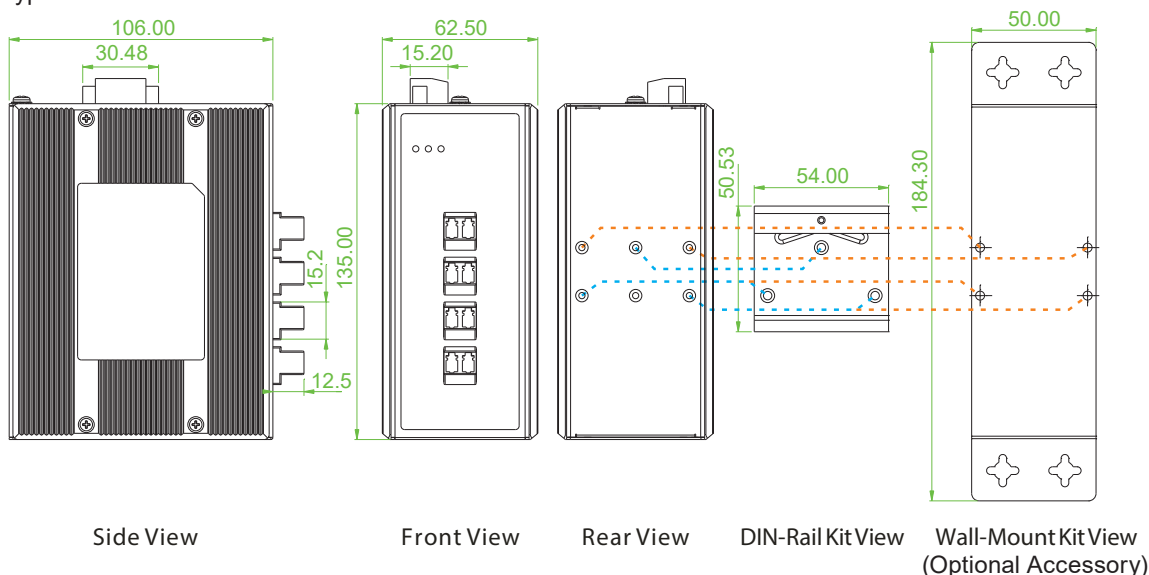
## Dimensions

► IBP-202 SC Type

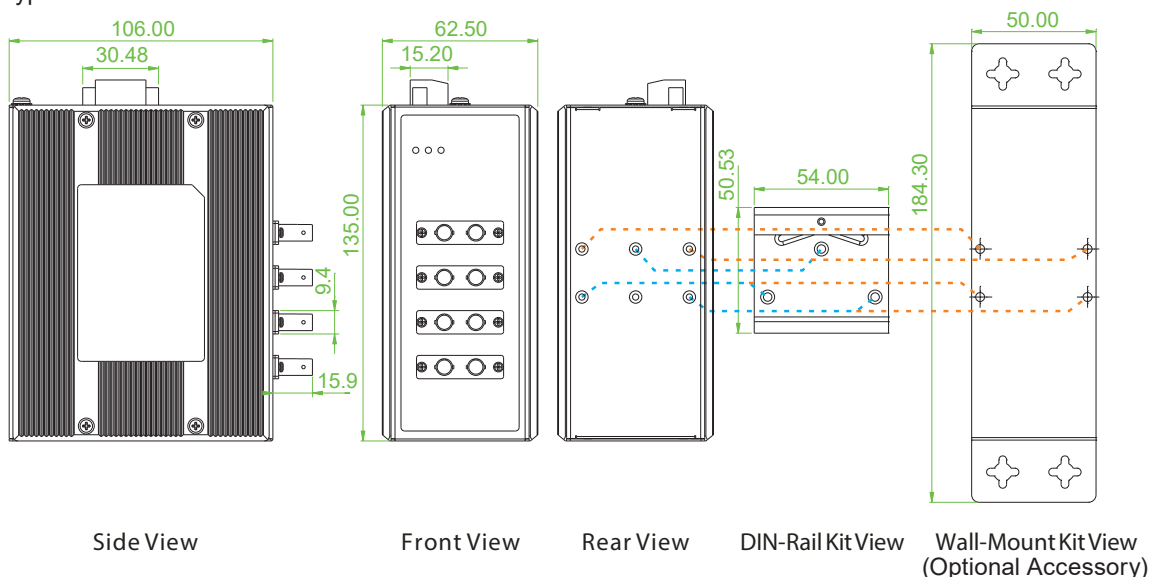


# Industrial Fiber Bypass Switch

## ▶ IBP-202 LC Type



## ▶ IBP-202 ST Type



## Ordering Information

Model Name	Fiber connector			Power Input	Certification			Operating Temperature
	Connector type	Connector Q'ty	Data Rate	Redundant	EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC	
IBP-202-SSC	SM SC	4	100M/Giga/10G	12/24/48VDC	V	V	V	-20~70°C
IBP-202-SST	SM ST	4	100M/Giga/10G	12/24/48VDC	V	V	V	-20~70°C
IBP-202-SLC	SM LC	4	100M/Giga/10G	12/24/48VDC	V	V	V	-20~70°C
IBP-202-MSC	MM SC	4	100M/Giga/10G	12/24/48VDC	V	V	V	-20~70°C
IBP-202-MST	MM ST	4	100M/Giga/10G	12/24/48VDC	V	V	V	-20~70°C
IBP-202-MLC	MM LC	4	100M/Giga/10G	12/24/48VDC	V	V	V	-20~70°C

## Optional Accessories

### ■ Wall Mount Kit

IND-WMK02 Wall Mount kit for Industrial product, 184 x 50mm (Wide)

### ■ Industrial Power Supply

MDR-20-24 Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 24VDC, 24W, -20 ~ 70°C  
 MDR-40-48 Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 48VDC, 40W, -20 ~ 70°C