IFS-402F

4x FE RJ45 + 2x 100Base-FX Fiber (ST/SC)

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◆ *Provides a DIP-Switch to Set Functions*

◆ *Supports Power Failure Slarm Message by Relay*

◆ *12/24/48VDC (9.6~60VDC) Redundant Dual Power Input*

◆ *IP30, Rugged Metal Housing, Fanless*

◆ *EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC Certified*

CE FC EN50121-4 EN61000-6-2 EN61000-6-4

The industrial unmanaged Ethernet switches provide stable and reliable Ethernet transmission, IFS-402F have 4-port 10/100Base-TX UTP and are equipped with 2 100Base-FX SC/ST optical fiber ports to meet Requirements for extending transmission distance Housed in rugged enclosures, designed for harsh environments, fanless, high MTBF, supports wide operating temperature, and redundant 12/24/48VDC power input, it is suitable for heavy-duty applications such as industrial networking, intelligent transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.

Features

- Wide operating temperature -40 ~ 75°C (-E model)
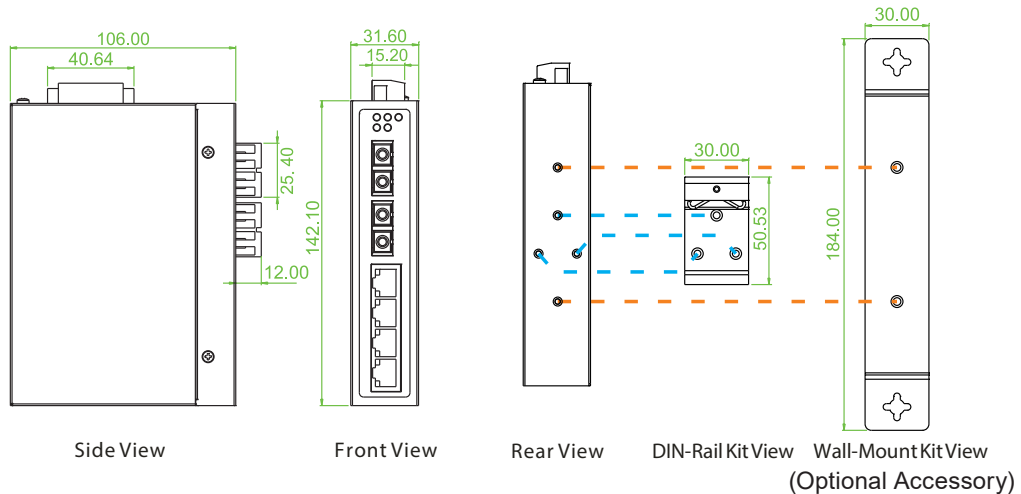- Provides broadcast storm protection

Specifications

Standard	IEEE 802.3	10Base-T Ethernet
	IEEE 802.3u	100Base-TX and 100Base-FX Fast Ethernet
	IEEE 802.3z	1000Base-X Gigabit Ethernet over fiber-optic
	IEEE 802.3x	Flow Control and Back Pressure
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Switch Architecture	Back-Plane (Switching Fabric): IFS-402 1.2Gbps (Full Wire-Speed)	
Data Processing	Store and Forward	
Transfer Rate	14,880pps for Ethernet port	
	148,800pps for Fast Ethernet port	
	1,488,000pps for Giga Ethernet port	
Flow Control	IEEE 802.3x flow control, back pressure flow control	
Provides Broadcast Storm Protection	Present, Enable /Disable set by DIP SW	
MAC Address Table	2K	
Packet Buffer Size	448Kbit	
Network Connector	4x RJ-45, 2x Fiber	
	RJ-45 Port: Auto MDI/MDI-X function, 10/100Base-TX Auto negotiation speed, Full/Half duplex	
	1 or 2x 100Base-FX SC/ST fiber port, Multi/Single Mode	

Network Cable	UTP/STP Cat. 5e cable or above
	EIA/TIA-568 100-ohm (100meter)
	Fiber Cable (Multi-mode): 50/125um~62.5/125um
	Fiber Cable (Single-mode): 8/125um~10/125um
	Wavelength: 1310nm (Multi-mode/Single-mode)
	Available distance: 2KM (Multi-Mode), 30KM (Single-Mode), 50KM (Single Mode)
Protocol	CSMA/CD
LED	System: Power 1 (Green), Power 2 (Green), Fault (Amber)
	UTP: Link/Active (Green), Speed 100 (Yellow)
	Fiber: Link/Active (Green)
DIP SW	DIP 1	OFF : Enable power failure alarm
		ON : Disable
	DIP 2	Broadcast storm protection
		OFF : Enable ON : Disables
Reverse Polarity Protection	Supported for Power Input
Overload Current Protection	Supported
Power Supply	Redundant Dual DC 12/24/48V (9.6~60VDC) Input power (Removable Terminal Block)
Power Consumption	5.8W
Alarm Relay Contact	Relay outputs with current carrying capacity of 1A @24VDC, NC
Removable Terminal Block	Provides 2 Redundant power, Alarm relay contact, 6 Pin
Operating Temperature	-10 ~ 60°C (IFS-402F)
	-40 ~ 75°C (IFS-402F-E)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP30 Protection and Fanless
Dimensions	106 x 31.6 x 142mm (D x W x H)
Weight	0.42kg
Installation Mounting	DIN Rail mounting or wall mounting (Optional)
MTBF	907,622 Hours (MIL-HDBK-217)
Warranty	5 years

Certification

EMC/EMS	CE (EN55032, EN55035)
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 (Burst) Level 3, Criteria A
	EN61000-4-5 (Surge) Level 3, Criteria B
	EN61000-4-6 (CS) Level 3, Criteria A
	EN61000-4-8 (PFMF, Magnetic Field) Field Strength: 300A/m, Criteria A
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Dimensions

Side View   Front View   Rear View   DIN-Rail Kit View   Wall-Mount Kit View

(Optional Accessory)

Ordering Information

Model Name	Total Port	RJ45	SC/ST	Certification			Operating Temperature
		10/100Base-TX	100Base-FX	EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC	
IFS-402F	6	4	2	V	V	V	-10~60°C
IFS-402F-E	6	4	2	V	V	V	-40~75°C

Fiber Connector	Connectivity Distance
SC, ST	002: 2km 030: 30km 050: 50km
	020A: WDM Bidi 20km A type (TX:1310nm)
	020B: WDM Bidi 20km B type (TX: 1550nm)

    * MOQ is requested for ST type

Optional Accessories

■ Wall Mount Kit

IND-WMK01	Wall Mount kit for Industrial product, 184 x 30mm (Narrow)

■ 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