IFS-500C

5x 10/100Base-TX Fast Ethernet Switch
(Compact)

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

This model is a compact sized, unmanaged industrial grade Fast Ethernet switch with 5 10/100Base-TX ports that provide stable and reliable Ethernet transmission. Housed in rugged DIN rail or wall mountable enclosures, these switches are designed for harsh environments, 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 (See Figure). Standard operating temperature range models (-10 to 60℃) and wide operating temperature range models (-40 to 75℃) fulfill the special needs of industrial automation applications.

Features

- Wide range input power 12/24/48VDC (9.6~60VDC), or AC24V (18~36VAC)
- IP30 rugged metal housing and Fanless
- Compact size for easy installation
- Wide operating temperature -40 ~ 75℃ (-E model)
- Very low power consumption
- Supports flow control
- CE, FCC,and EN50121-4 for railway traffic certification
- Heavy industrial grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified

Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet
	IEEE 802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric) : 1.0 Gbps Full wire-speed
Data Processing	Store and Forward
Transfer Rate	14,880pps for Ethernet port
	148,800pps for Fast Ethernet port
Flow Control	IEEE 802.3x flow control, back pressure flow control
MAC Address Table	1K
Packet Buffer Size	448Kbits
Network Connector	5x RJ-45
	RJ-45 Port: Auto MDI/MDI-X function, 10/100Base-TX auto negotiation speed, Full/Half duplex
Network Cable	10Base-T: 2-pair UTP/STP Cat. 5 cable
	EIA/TIA-568 100-ohm (100m)
	100Base-TX: 2-pair UTP/STP Cat. 5 cable
	EIA/TIA-568 100-ohm (100m)
Protocol	CSMA/CD
LED	Per unit: Power (Green)
	RJ-45 Per port: Link/Active (Green), Speed 100 (Yellow)
Reverse Polarity Protection	For DC input power protection
Overload Current Protection	Supported
Power Supply	DC 12/24/48V (9.6~60VDC) or AC 24V (18~36VAC) input power (Removable Terminal Block)

Power Consumption	Input Voltage	Power Consumption(Watt)
	DC 12V	0.9W
	DC 24V	1.2W
	DC 48V	2W

Removable Terminal Block	Provides for input power (2 Pin)
Operating Temperature	-10 ~ 60℃ (IFS-500C)
	-40 ~ 75℃ (IFS-500C-E)
Operating Humidity	5% to 95% (Non-condensing)

Storage Temperature	-40 ~ 85℃
Housing	Rugged Metal, IP30 Protection and Fanless
Dimensions	70 x 30 x 103 mm (D x W x H)
Weight	220g
Installation Mounting	DIN Rail mounting, or wall mounting (optional)
MTBF	1,738,327 Hours (MIL-HDBK-217)
Warranty	5 years
Certification	
EMC/EMS	CE
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

Application

Figure : IFS-500C Fast Ethernet Switch Transmission

Dimensions

Side View | Front View | Rear View | DIN-Rail Kit View | Wall-Mount Kit View **(Optional accessory)**
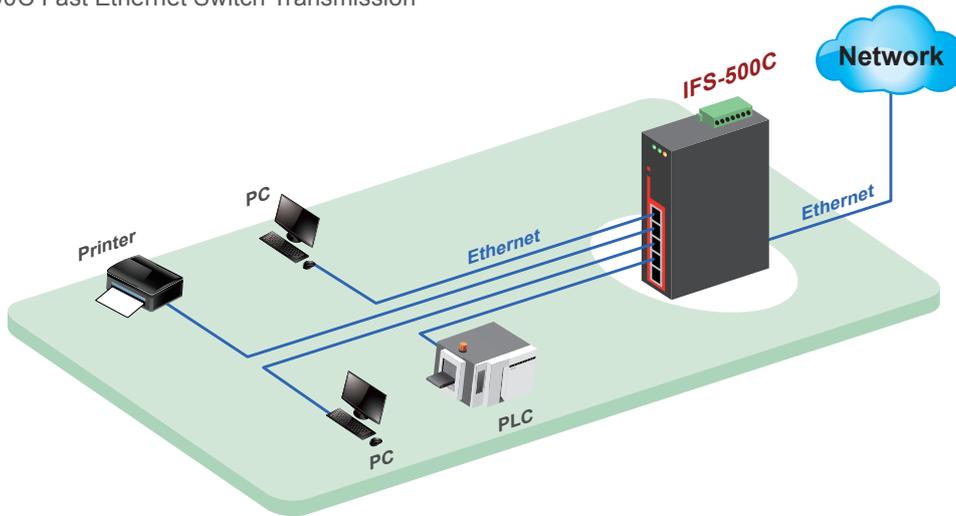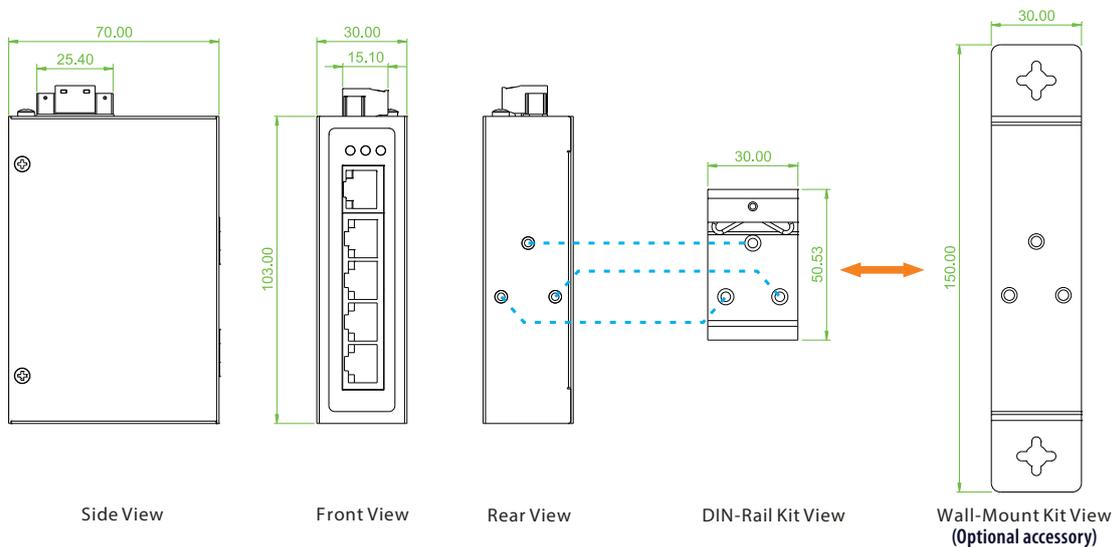
Ordering Information

| Model Name | Total Port | RJ45 UTP port | Power input | Certification | | | | Operating Temperature |
		10/100Base-TX	Single power	Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE	FCC	
IFS-500C	5	5	12/24/48VDC, 24VAC	V	V	V	V	-10~60℃
IFS-500C-E	5	5	12/24/48VDC, 24VAC	V	V	V	V	-40~75℃

Model Naming Rule

IFS — 5 00 C — E — E: -40~75℃   Blank: -10~60°C

Industrial Fast Ethernet Switch
5: 5x FE UTP   00: 0x Fiber   C: Compact Size
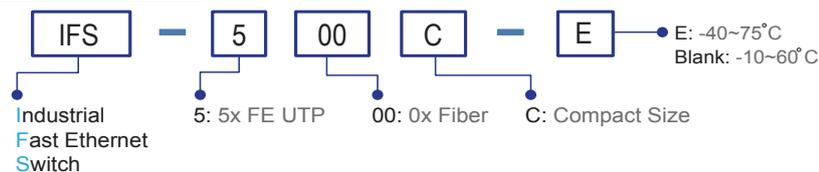
■ **Package List**

- IFS-500C device
- Quick installation guide
- Din Rail with screws
- Terminal block

Optional Accessories

■ **Wall mount kit Accessories**

| IND-WMK03 | Wall Mount kit for Industrial product (Compact, 150 x 30mm) |

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Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.
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