

# IFS-402CGS

4x 10/100Base-TX RJ45 + 2x 100/1000Base-X SFP, Compact size



- 4KV surge protection for UTP and SFP ports
- Wide operating temperature -40 ~ 75°C
- IP30 rugged metal housing and fanless



The IFS-402CGS is a 6 Ports unmanaged industrial grade Ethernet switch that provides stable and reliable Ethernet transmission. Housed in rugged DIN rail or wall mountable enclosures, the switch is designed for harsh environments, such as industrial networking, security automation applications, IP Surveillance, intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. Standard operating temperature range models (-10 to 60°C) and wide operating temperature range models (-40 to 75°C) fulfill the special needs of industrial automation applications.

#### **Features**

- 12/24/48VDC (9.6~60VDC) redundant dual input power
- Supports DIP switch to set broadcast storm protection, SFP Auto/Force Mode, SFP 100M/1000M; RJ45 Auto/force mode, 10M/100M, Full/half.
- Supports flow control
- Provides broadcast storm protection
- DIN Rail mounting or wall mounting

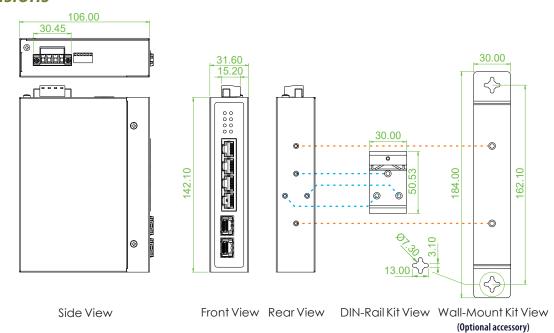
**Specifications** 

Specification	7113				
IEEE 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			
Switch Architecture	Back-plane (Switching Fabric): 4.8 Gbps				
Data Processing	Store and Forward				
Flow Control	IEEE 802.3x flow control, back pressure flow control				
MAC Address Table	4K				
Packet Buffer Size	1.75Mbit				
Max Frame Size	1522Bytes				
Jumbo Frame	10K Byte				
Network Connector	4x RJ-45 for 10/100Base-TX Auto Negotiation Speed or Force Mode, Auto MDI/MDI-X function, Full/Half duplex 2x 100/1000Base-X SFP, Auto or Force Mode				
Network Cable	UTP/STP Cat. 5e cable or above				
	EIA/TIA-568 100-ohm (100meter)				
Network Cable	Fiber Cable (Multi-mode): 50/125um, 62.5/125um Fiber Cable (Single-mode): 9/125um				
Protocols	CSMA/CD				
LED	Per unit: Pov	wer 1 (Green), Power 2 (Green)			
	Per RJ-45 po	ort : 100M Link/Act (Green) 10M Link/Act (Amber)			
	SFP Fiber po	ort: 100 Link/Active (Green) 1000 Link/Active (Amber)			
DIP SW	DIP 1	Broadcast Protection  OFF: Enable ON: Disable			
	DIP 2	Off: Fiber Auto On: Fiber Force Mode			
	DIP 3	SFP Fiber Speed OFF: Giga ON: 100M			
	DIP 4	RJ45 Mode OFF: Auto ON: Force			
	DIP 5	RJ45 Speed OFF: 100M ON: 10M			
	DIP 6	RJ45 Duplex OFF: Full ON: Half			
Reverse Polarity Protection	Supported	for Power Input			

Protection	Supported			
Power Supply	Redundant dual 12/24/48VDC (9.6~60VDC) in power (Removable terminal block)			
Power Consumption	Input Voltage	Total Power Consumption		
	12VDC	4.7W		
	24VDC	4.8W		
	48VDC	5.3W		
Removable Terminal Block	Provides 2 Redundant power, 4 Pin			
Operating	-10 ~ 60°C (IFS-402CGS)			
Temperature	-40 ~ 75°C (IFS-402CGS-E)			
<b>Operating Humidity</b>	5% to 95% (Non-conder	nsing)		
Storage Temperature	-40 ~ 85°C			
Housing	Rugged metal, IP30 Protection and fanless			
Dimensions	106x 31.6x 142mm (D X W X H)			
Weight	420g			
Installation Mounting	DIN Rail mounting, or wall mounting (Optional)			
MTBF	940,044Hours (MIL-HDBK-217)			
Warranty	5 years			
Certification				
EMC	CE (EN55032, EN55035)			
EMI (Electromagnetic	FCC Part 15 Subpart B C	lass A, CE		
Interference)				
EMS (Floatromagnetic	EN61000-4-2 (ESD) Leve	'		
(Electromagnetic Susceptibility)	EN61000-4-3 (RS) Level 3, Criteria A			
Protection Level	EN61000-4-4 (Burst) Level 3, Criteria A			
	EN61000-4-5 (Surge) Lev			
	EN61000-4-6 (CS) Level	,		
	300A/m, Criteria A	gnetic Field) Field Streng		
	Supported for UTP and SFP port			
Shock	IEC 60068-2-27			
Freefall	IEC 60068-2-31			
Vibration	IEC 60068-2-6			



### **Dimensions**



## **Ordering Information**

		RJ45 UTP Port Fiber Port		Input Power	Certification		Operating
Model Name	Total Port	10/100Base-T(X) 100/1000Base-	100/1000Base-X	Redundant	CE	FCC	Temperature
IFS-402CGS	6	4	2 SFP	12/24/48VDC	V	V	-10~60°C
IFS-402CGS-E	6	4	2 SFP	12/24/48VDC	V	V	-40~75°C

#### ■ Package List

- IFS-402CGS device
- Din Rail with screws
- Terminal block
- Protective caps for SFP ports

## **Optional Accessories**

#### ■ Wall Mount Kit

IND-WMK01 Wall Mount kit for Industrial product (184x30mm) (Narrow)

#### ■ Industrial SFP Transceiver

The ISFP series of industrial grade SFP modules have been fully tested with all CTC Union industrial grade Ethernet switches for guaranteed compatibility and performance. Best performance can be guaranteed, even in mission-critical applications. (Please see CTC Union's Industrial SFP datasheets for more items and detailed information.)

ISFP-M7000-85-(E)	Industrial SFP GbE 1000Base-SX, M/M, 500 meter,wave length 850nm, 7.5dB, LC, -10~70°C (-40~85°C)
ISFP-S7020-31-(E)	Industrial SFP 1000Base-LX, S/M, 20km, wave length 1310nm, 15dB, LC, -10~70°C (-40~85°C)
ISFP-T7T00-00-(E)	Industrial SFP 10/100/1000Base-T UTP 100meter, -10~70°C (-40~85°C)
ISFP-M5002-31-D(E)	Industrial SFP 155M 100Base-FX, MM, 2km, wave length 1310nm, 12dB, LC, DDMI, -10~70°C (-40~85°C)
ISFP-S5030-31-D(E)	Industrial SFP 155M 100Base-FX, SM, 30km, 1310nm, 19dB, LC, DDMI, −10~70°C (-40~85°C)

#### ■ 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 $\sim$ 264VAC/120 $\sim$ 370VDC, Output 48VDC, 40W, -20 $\sim$ +70 $^{\circ}$ C

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