

## IGS-402CS

4x 10/100/1000Base-T 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 IGS-402CS is a 6 Ports unmanaged industrial grade Ethernet switch that provide 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

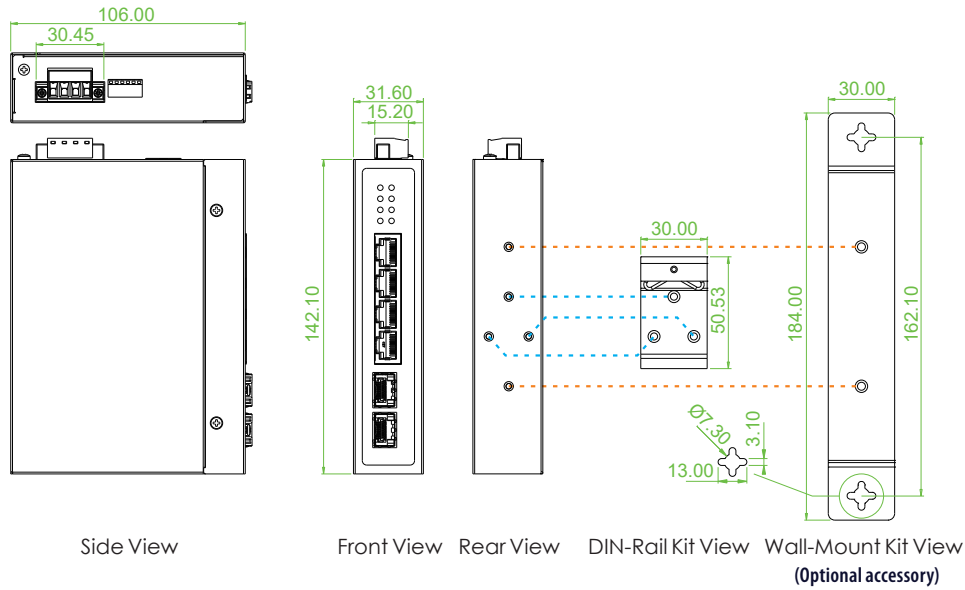
- 12/24/48VDC (9.6~60VDC) redundant dual input power
- Supports DIP switch to set broadcast storm protection, SFP Auto/Force Mode, SFP 100M/1000M ; RJ45 Auto/force mode, 10M/100M, Full/half.
- Supports flow control
- Provides broadcast storm protection
- DIN Rail mounting or wall mounting

### Specifications

<b>IEEE Standard</b>	IEEE 802.3	10Base-T Ethernet
	IEEE 802.3u	100Base-TX and 100Base-FX Fast Ethernet
	IEEE 802.3ab	1000Base-T Gbit/s Ethernet over twisted pair
	IEEE 802.3z	1000Base-X Gigabit Ethernet over fiber-optic
	IEEE 802.3x	Flow Control and Back Pressure
<b>Switch Architecture</b>	Back-plane (Switching Fabric): 12 Gbps	
<b>Data Processing</b>	Store and Forward	
<b>Flow Control</b>	IEEE 802.3x flow control, back pressure flow control	
<b>MAC Address Table</b>	4K	
<b>Packet Buffer Size</b>	1.75Mbit	
<b>Max Frame Size</b>	1522Bytes	
<b>Jumbo Frame</b>	10K Byte	
<b>Network Connector</b>	4x RJ-45 for 10/100/1000Base-T Auto Negotiation Speed or Force Mode, Auto MDI/MDI-X function, Full/Half duplex	
	2x 100/1000Base-X SFP, Auto or Force Mode	
<b>Network Cable</b>	UTP/STP Cat. 5e cable or above	
	EIA/TIA-568 100-ohm (100meter)	
<b>Network Cable</b>	Fiber Cable (Multi-mode): 50/125um, 62.5/125um	
	Fiber Cable (Single-mode): 9/125um	
<b>Protocols</b>	CSMA/CD	
<b>LED</b>	Per unit: Power 1 (Green), Power 2 (Green)	
	Per RJ-45 port : 10/100M Link/Act (Green)	
	1000M Link/Act (Amber)	
	SFP Fiber port: 100 Link/Active (Green)	
	1000 Link/Active (Amber)	
<b>DIP SW</b>	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

<b>Reverse Polarity Protection</b>	Supported for Power Input	
<b>Overload Current Protection</b>	Supported	
<b>Power Supply</b>	Redundant dual 12/24/48VDC (9.6~60VDC) input power (Removable terminal block)	
<b>Power Consumption</b>	<b>Input Voltage</b>	<b>Total Power Consumption</b>
	12VDC	5.8W
	24VDC	6.5W
	48VDC	8.2W
<b>Removable Terminal Block</b>	Provides 2 Redundant power, 4 Pin	
<b>Operating Temperature</b>	-10 ~ 60°C (IGS-402CS)	
	-40 ~ 75°C (IGS-402CS-E)	
<b>Operating Humidity</b>	5% to 95% (Non-condensing)	
<b>Storage Temperature</b>	-40 ~ 85°C	
<b>Housing</b>	Rugged metal, IP30 Protection and fanless	
<b>Dimensions</b>	106x 31.6x 142mm (D X W X H)	
<b>Weight</b>	420g	
<b>Installation Mounting</b>	DIN Rail mounting, or wall mounting (Optional)	
<b>MTBF</b>	862,267Hours (MIL-HDBK-217)	
<b>Warranty</b>	5 years	
<b>Certification</b>		
<b>EMC</b>	CE (EN55032, EN55035)	
<b>EMI (Electromagnetic Interference)</b>	FCC Part 15 Subpart B Class A, CE	
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	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	
<b>4KV surge protection</b>	Supported for UTP and SFP port	
<b>Shock</b>	IEC 60068-2-27	
<b>Freefall</b>	IEC 60068-2-31	
<b>Vibration</b>	IEC 60068-2-6	

## Dimensions



## Ordering Information

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

### Package List

- IGS-402CS 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 ~ 264VAC/120 ~ 370VDC, Output 48VDC, 40W, -20 ~ +70°C