

IGS-402CS-4PH

4x 10/100/1000Base-T RJ45 + 2x 100/1000M Base-X SFP with 4x PoE 120W, Compact size



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



The IGS-402CS-4PH is 6 Ports unmanaged industrial grade Ethernet PoE switches with 4x 10/100/1000Base-T PoE+/PoE 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, security automation applications, IP Surveillance, intelligent transportation systems (ITS) and are 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

- Provides 4-port IEEE 802.3at/af PoE output (30W/Per Port)
- Maximum PoE output power budget 120W
- 48VDC (44~57VDC) 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

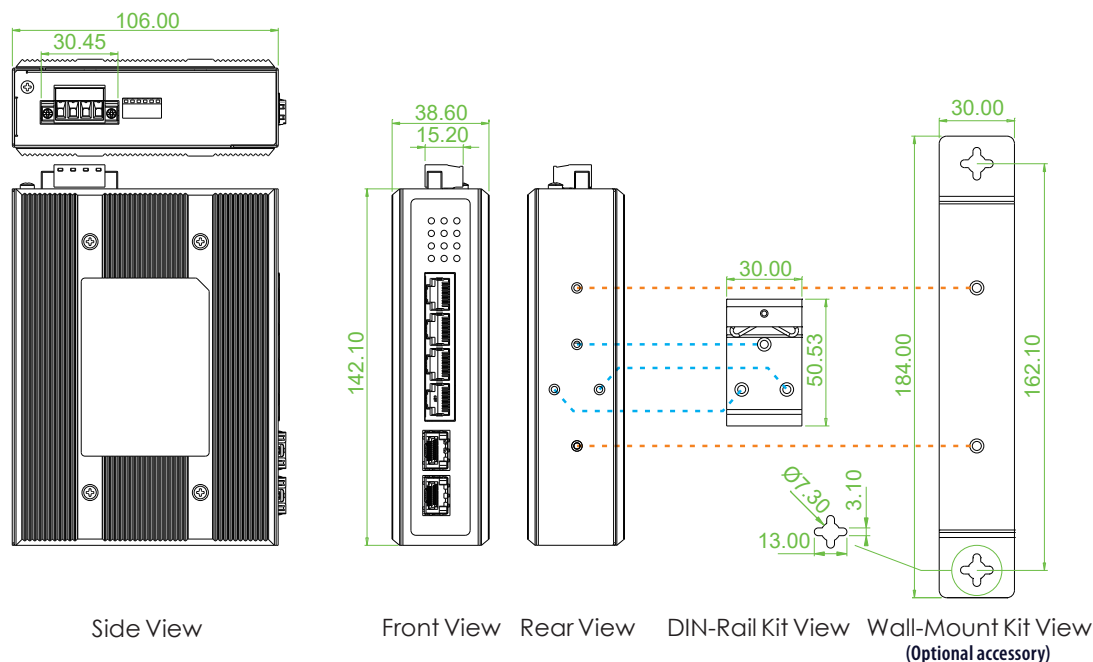
IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE 802.3ab 1000Base-T Gbit/s Ethernet over twisted pair IEEE 802.3z 1000Base-X Gigabit Ethernet over fiber-optic IEEE 802.3x Flow Control and Back Pressure IEEE 802.3at PoE+ (Power over Ethernet enhancements) IEEE 802.3af PoE (Power over Ethernet)
Switch Architecture	Back-plane (Switching Fabric): 12 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
PoE standard	IEEE 802.3at/af
PoE RJ-45 pin Assignment	RJ-45 port #1~#4 support IEEE 802.3at/af End-Span, Alternative A mode Positive (V+): RJ-45 pin 1, 2. Negative (V-): RJ-45 pin 3, 6. Data (1,2,3,6,4,5,7,8)
Network Connector	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
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: Power 1 (Green), Power 2 (Green) Per RJ-45 port : 10/100M Link/Act (Green) 1000M Link/Act (Amber)

LED	Fiber Per port: 100 Link/Active (Green) 1000 Link/Active (Amber) Per PoE Port LED (Green) • Active : ON • Inactive : OFF								
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 RJ45 Mode DIP 4 OFF: Auto ON: Force RJ45 Speed DIP 5 OFF: 100M ON: 10M RJ45 Duplex DIP 6 OFF: Full ON: Half								
Reverse Polarity Protection	Supported for Power Input								
Overload Current Protection	Supported								
Power Supply	Redundant dual 48VDC (44~57VDC) input power (Removable terminal block) (50~57V input is recommended for IEEE802.3at in 30W applications)								
Power Consumption	<table border="1"> <thead> <tr> <th>Input Voltage</th> <th>Total Power Consumption</th> <th>Device Power Consumption</th> <th>Power Budget</th> </tr> </thead> <tbody> <tr> <td>50VDC</td> <td>130W</td> <td>8.2W</td> <td>120W</td> </tr> </tbody> </table>	Input Voltage	Total Power Consumption	Device Power Consumption	Power Budget	50VDC	130W	8.2W	120W
Input Voltage	Total Power Consumption	Device Power Consumption	Power Budget						
50VDC	130W	8.2W	120W						
PoE Power Budget	Maximum PoE Output power budget 120W (30W/Per Port)								
Removable Terminal Block	Provides 2 Redundant power, 4 Pin								
Operating Temperature	-10 ~ 60°C (IGS-402CS-4PH) -40 ~ 75°C (IGS-402CS-4PHE)								
Operating Humidity	5% to 95% (Non-condensing)								
Storage Temperature	-40 ~ 85°C								
Housing	Rugged metal, IP30 Protection and fanless								
Dimensions	106x 38.6x 142mm (D X W X H)								
Weight	705g								
Installation Mounting	DIN Rail mounting, or wall mounting (Optional)								

MTBF	745,955Hours (MIL-HDBK-217)
Warranty	5 years
Certification	
EMC	CE (EN55032, EN55035)
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE

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
4KV surge protection	Supported for PoE, UTP and SFP port
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6

Dimensions



Ordering Information

Model Name	Total Port	RJ45 UTP Port	Fiber Port	PoE Port		Input Power	Certification	Operating Temperature
		10/100/1000 Base-T(X)	100/1000Base-X	IEEE802.3at	Power Budget	Redundant	CE,FCC	
IGS-402CS-4PH	6	4	2 SFP	4	120W	48VDC	V	-10~60°C
IGS-402CS-4PHE	6	4	2 SFP	4	120W	48VDC	V	-40~75°C

Package List

- IGS-402CS-4PH device
- Protective caps for SFP ports
- Din Rail with screws
- Terminal block

Optional Accessories

Wall Mount Kit

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

NDR-120-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 120W, -20 ~ +70°C (For IGS-402CS-4PH)
NDR-240-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 240W, -20 ~ +70°C (For more ref.)