

IGS-402S-4PH24

4x GbE RJ45 + 2x 100/1000Base SFP with 4x PoE 120W, 24/48VDC



- 24/48VDC (20~57VDC) redundant dual input power with built-in very high efficiency booster
- Regulate PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter
- Provides a DIP-Switch to set functions



The model is 6 port unmanaged industrial grade Gigabit PoE switch with 4x 10/100/1000Base-T PoE ports 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 are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications (See figure 1). 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
- Supports power failure alarm message by relay
- Supports flow control
- Jumbo frame support
- IP30 rugged metal housing and fanless
- Wide operating temperature -40 ~ 75°C ("E" model)

Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af PoE (Power over Ethernet) IEEE 802.3at PoE+ (Power over Ethernet enhancements)
Switch Architecture	Back-plane (Switching Fabric): 12Gbps Full wire-speed
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Provides Broadcast Storm Protection	Enable / Disable set by DIP SW
Jumbo Frame	10K Bytes
MAC Address Table	8K
Packet Buffer Size	1Mbits
PoE standard & RJ-45 Pin Assignment	4x IEEE 802.3at/af PoE+ 2 pairs PoE, PoE+ 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	4 x RJ-45 10/100/1000Base-T auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex 2x 100/1000Base-X SFP
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): 9/125um
Protocols	CSMA/CD
LED	Per unit: Power 1 (Green), Power 2 (Green), Fault (Amber) Fiber Per port: Link/Active (Green) Per Port PoE LED • Active : ON • Inactive : OFF • Fault : Flash (Fault: Over Load, Short Circuit, Port failed at Startup)
DIP SW	DIP 1 ON : Disable power failure alarm OFF : Enable power failure alarm DIP 2 ON : Disables broadcast storm protection OFF : Enable broadcast storm protection DIP 3 ON : Fiber 2 for 100Base-FX SFP OFF : Fiber 2 for Gigabit SFP DIP 4 ON : Fiber 1 for 100Base-FX SFP OFF : Fiber 1 for Gigabit SFP
Reverse Polarity Protection	Supported for Power Input

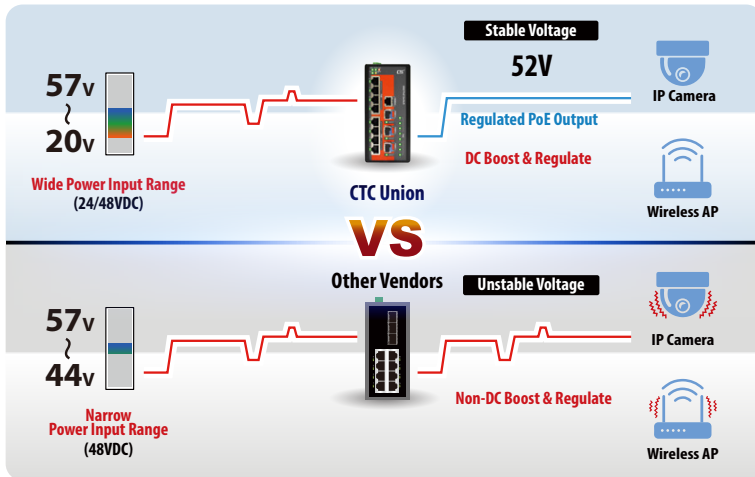
Overload Current Protection	Supported						
Power Supply	Redundant Dual DC 24/48V (20~57VDC) input power (Removable Terminal Block) Built-in very high efficiency booster(94~97%) to rise up 52VDC for PoE output Regulated PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter (Figure)						
Power Consumption	<table border="1"> <thead> <tr> <th>Input Voltage</th> <th>IGS-402S-4PH24</th> </tr> </thead> <tbody> <tr> <td>24VDC</td> <td>143.3W</td> </tr> <tr> <td>48VDC</td> <td>138.2W</td> </tr> </tbody> </table> (Include full load 120W PoE output)	Input Voltage	IGS-402S-4PH24	24VDC	143.3W	48VDC	138.2W
Input Voltage	IGS-402S-4PH24						
24VDC	143.3W						
48VDC	138.2W						
PoE Power Budget	Maximum PoE Output power budget 120W, 30W/ per port						
Alarm Relay Contact	Relay outputs with current carrying capacity of 1A @24VDC						
Removable Terminal Block	Provides 2 Redundant power, Alarm relay contact, 6 Pin						
Operating Temperature	-10 ~ 60°C (IGS-402S-4PH24) -40 ~ 75°C (IGS-402S-4PHE24)						
Operating Humidity	5% to 95% (Non-condensing)						
Dimensions (D x W x H)	106 x 62.5 x 134.8mm						
Housing	Rugged Metal, IP30 Protection, Fanless						
Weight	0.84kg						
Installation Mounting	DIN Rail mounting, or wall mounting (Optional accessories)						
MTBF	736,988 Hours @25°C (MIL-HDBK-217)						
Warranty	5 years						
Certification							
EMC	CE						
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE EN55022 Class A						
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						

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Industrial Unmanaged GbE PoE Switch IGS-402S-4PH24

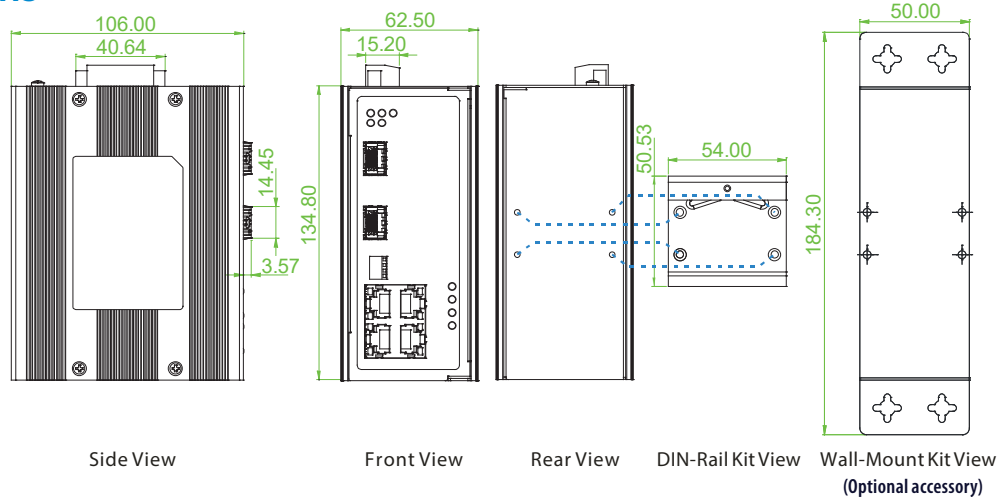
Application

Figure : High efficiency boost technology for PoE



- Regulated PoE output voltage (52VDC) to stabilize PoE device
- Guarantee delivery PoE power distance to 100 meters
- Wide range input power 24/48VDC (20~57VDC)
- Built-in very high efficiency (94~97%) to boost PoE output voltage

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)	100/1000 Base-X	IEEE 802.3at	Power Budget			
IGS-402S-4PH24	6	4	2 SFP	4	120W	24/48VDC	V	-10~60°C
IGS-402S-4PHE24	6	4	2 SFP	4	120W	24/48VDC	V	-40~75°C

Package List

- IGS-402S-4PH24 device
- Terminal block
- Din Rail with screws
- Protective caps for SFP ports

Optional Accessories

Wall Mount Kit

IND-WMK02 Wall Mount kit for Industrial product (Wide) (184x50mm)

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-D(E) Industrial SFP GbE 1000Base-SX, M/M, 500 meter, wave length 850nm, 7.5dB, LC, DDMI, -10~70°C (-40~85°C)

ISFP-S7020-31-D(E) Industrial SFP 1000Base-LX, S/M, 20km, wave length 1310nm, 15dB, LC, DDMI, -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-402S-4PH24)

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