

IFS-402CGS

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

NEW



- EN50121-4, EN61000-6-2, EN61000-6-4, CE, FCC certified
- 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

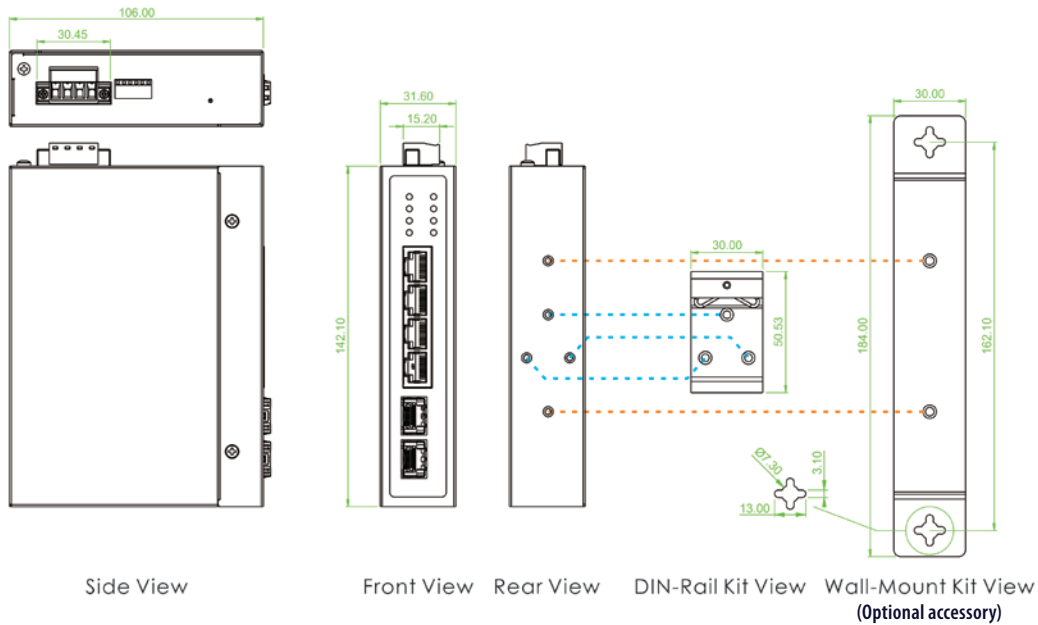
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|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| IEEE 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 above Cat. 5e cable EIA/TIA-568 100-ohm (100m) | |
| 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 : 100M Link/Act (Green) 10M Link/Act (Amber) Fiber Per port: Link/Active (Green) | |
| 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 | |
| Overload Current Protection | Supported | |
| Power Supply | Redundant dual 12/24/48VDC (9.6~60VDC) input power (Removable terminal block) | |

| Power Consumption | Input Voltage | Total Power Consumption |
|--------------------------|---------------|-------------------------|
| | 12VDC | 4.7W |
| 24VDC | 4.8W | |
| 48VDC | 5.3W | |

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|---------------------------------|------------------------------------------------------|
| Removable Terminal Block | Provides 2 Redundant power, 4 Pin |
| Operating Temperature | -10 ~ 60°C (IFS-402CGS) -40 ~ 75°C (IFS-402CGS-E) |
| Operating Humidity | 5% to 95% (Non-condensing) |
| 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 |

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| Certification | CE (EN55032, EN55035) |
| EMC (Electromagnetic Interference) | FCC Part 15 Subpart B Class A, CE |
| Railway Traffic Immunity for Heavy Industrial Environment | EN50121-4 |
| Emission for Heavy Industrial Environment | EN61000-6-2 |
| EMS (Electromagnetic Susceptibility) Protection Level | EN61000-6-4 |
| Safety | 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 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 | Input Power | Certification | | | Operating Temperature |
|--------------|------------|------------------|----------------|-------------|---------------|-------------------|----------------------------|-----------------------|
| | | 10/100 Base-T(X) | 100/1000Base-X | | Redundant | Railway EN50121-4 | EN61000-6-2 EN61000-6-4 | |
| IFS-402CGS | 6 | 4 | 2 SFP | 12/24/48VDC | V | V | V | -10~60°C |
| IFS-402CGS-E | 6 | 4 | 2 SFP | 12/24/48VDC | V | V | V | -40~75°C |

Package List

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

Optional Accessories

Wall Mount Kit Accessories

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 the series product for guaranteed compatibility and performance. The best performance can be guaranteed even in mission-critical applications. (Please see CTC Union's Industrial SFP datasheet for more details and more items.)

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|--------------------|---------------------------------------------------------------------------------------------------|
| 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

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|-----------|----------------------------------------------------------------------------------|
| 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 |