

IGS-401F

4x 10/100/1000Base-T+ 1x 1000Base-SX/LX
Gigabit Ethernet Switch

IGS-402F

4x 10/100/1000Base-T+ 2x 1000Base-SX/LX
Gigabit Ethernet Switch



IGS-401F/402F models are 4 port 10/100/1000Base-T Ethernet non-managed Gigabit switches, with either 1 x 1000Base-X fiber port (IGS-401F) or 2 x 1000Base-X fiber ports, 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, 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

- 12/24/48VDC redundant dual input power design
- 4x Port 1000Base-T RJ-45 with 1 or 2 Fiber Gigabit Ethernet
- Wide operating temperature -40 ~ 75°C (IGS-401F-E, IGS-402F-E)
- Provides broadcast storm protection
- Supports DIP SW for alarm setting and broadcast storm protection
- Supports power failure alarm message by relay
- Supports flow control
- UL60950-1, CE, FCC certification
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified
- IP30 rugged metal housing

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
Switch Architecture	Back-plane (Switching Fabric): 10Gbps (IGS-401F, IGS-401F-E) Back-plane (Switching Fabric): 12Gbps (IGS-402F, IGS-402F-E)
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Provides Broadcast Storm Protection	Present, Enable / Disable set by DIP SW
Jumbo Frame	10K Bytes
MAC Address Table	8K
Packet Buffer Size	1Mbits
Network Connector	4 x RJ-45 10/100/1000Base-TX auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex 1 or 2 1000Base-X Fiber connector : SC
Network Cable	UTP/STP above Cat. 5e cable EIA/TIA-568 100-ohm (100m) 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) RJ-45 port : Link/Active (Green), Speed 10 (OFF), 100 (Green), 1000 (Yellow) Fiber Per port: Link/Active (Green)
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
Reserve Polarity Protection	Present
Overload current protection	Present

Power Supply	Redundant Dual DC 12/24/48V (9.6~60VDC) Input power (Removable Terminal Block) Provide DC Power JACK adapter cable for external power supply
Power Consumption	Max 7.79W (IGS-401F) Max 7.83W (IGS-402F)
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC
Removable Terminal Block	Provide 2 Redundant power, Alarm relay contact, 6 Pin
Operating Temperature	-10 ~ 60°C (IGS-401F, IGS-402F) -40 ~ 75°C (IGS-401F-E, IGS-402F-E)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP30 Protection
Dimensions	106 x 62.5 x 134.8 mm (D X W X H)
Weight	0.67kg (IGS-401F), 0.68kg (IGS-402F)
Installation Mounting	DIN Rail mounting or wall mounting
EMC/EMS	CE, FCC
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A EN61000-6-4 – Emission for industrial environment
EMS	EN61000-6-2 – Immunity for Industrial environment EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (EFT) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (Magnetic Field) Level 3, Criteria A
Safety	UL60950-1
Rail Traffic	EN 50121-4
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
MTBF	407,596 Hours (IGS-401F) 391,633 Hours (IGS-402F)
Warranty	5 years

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

Application

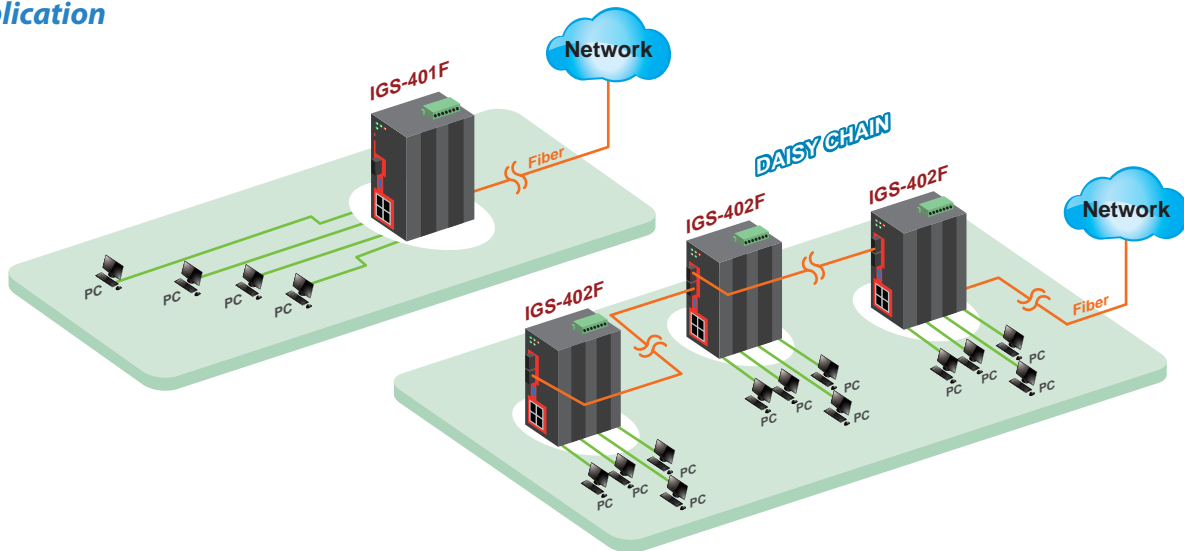
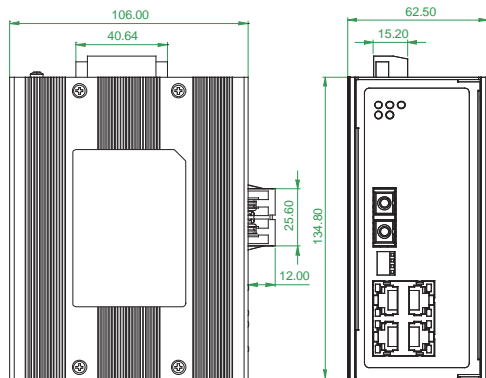


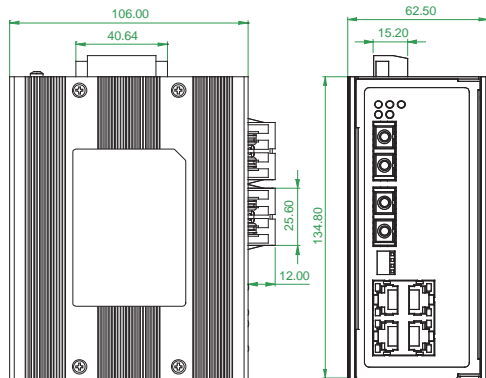
Figure : IGS-401F & IGS-402F Gigabit Ethernet Switch Transmission

Dimensions

IGS-401F

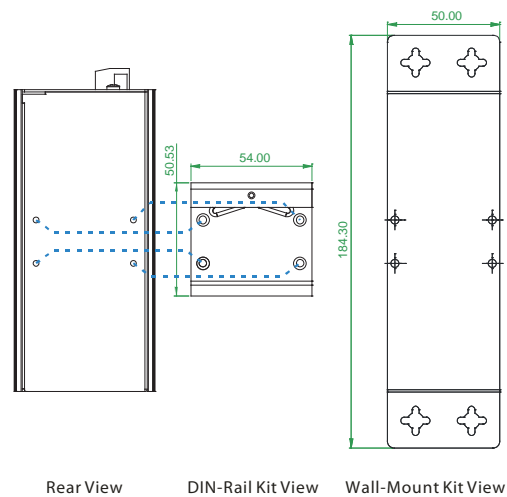


IGS-402F



Side View

Front View



Rear View

DIN-Rail Kit View

Wall-Mount Kit View

Ordering Information

Model Name	Description
IGS-401F	4-Port 10/100/1000Base-T + 1-Port 1000Base Gigabit Ethernet Switch (-10 ~ 60°C)
IGS-401F-E	4-Port 10/100/1000Base-T + 1-Port 1000Base Gigabit Ethernet Switch (-40 ~ 75°C)
IGS-402F	4-Port 10/100/1000Base-T + 2-Port 1000Base Gigabit Ethernet Switch (-10 ~ 60°C)
IGS-402F-E	4-Port 10/100/1000Base-T + 2-Port 1000Base Gigabit Ethernet Switch (-40 ~ 75°C)
Fiber Connector	Connectivity Distance
SC (IGS-401F & IGS-401F-E only)	SC001: 500m (SC, M/M) 002: 2km (M/M) SC020: 20km (SC, S/M) SC040: 40km (SC, S/M) SC020A: WDM 20km A type (TX:1310nm) SC020B: WDM 20km B type (TX:1550nm)

Accessories

DR-4524	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 48W, -10 ~ +50°C
MDR-40-24	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 40W, -20 ~ +70°C

Port Number Temperature Connector Type Connectivity Distance
IGS - 40 **F** - -
 Example: IGS - 401F - E - SC002