

IGS-401F-4PH24 IGS-402F-4PH24

4x 10/100/1000Base-T + 1 or 2x 1000Base-X
Fiber with 4xPoE+ Ethernet Switch
(120 Watts, 24V Booster)



IGS-401F/402F-4PH24 models are non-managed industrial grade Gigabit PoE (Power over Ethernet) switches with 4x 10/100/1000Base-T PoE ports and 2 fixed Gigabit Ethernet 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

- Provides 4-port IEEE802.3at/af PoE output (30W/Per Port)
- Maximum PoE output power budget 120W
- 24/48VDC redundant dual input power design
- 4-Port 1000Base-T RJ-45 with 1 or 2 Fiber Gigabit Ethernet
- Regulated PoE output voltage at 55VDC
- Wide operating temperature -40 ~ 75°C (IGS-401F-4PHE24, IGS-402F-4PHE24)
- UL60950-1, CE, FCC, EN50121-4 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 IEEE 802.3at, IEEE802.3af
Switch Architecture	Back-plane (Switching Fabric): 10Gbps (IGS-401F-4PH24, IGS-401F-4PHE24) Back-plane (Switching Fabric): 12Gbps (IGS-402F-4PH24, IGS-402F-4PHE24)
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
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	4 x RJ-45 10/100/1000Base-T auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex 1 or 2x1000Base-X Fiber connector: SC Multi Mode or Single Mode
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) Per RJ-45 port : Link/Active (Green), Speed 10 (OFF), 100 (Green), 1000 (Yellow) Fiber Per port: Link/Active (Green) PoE Port LED : • Active : ON • Inactive : OFF • Fault : Flash (Over Load, Short Circuit, Port failed at Startup)
Safety	UL60950-1
Rail Traffic	EN 50121-4

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 24/48V (20~57VDC) Input power (Removable Terminal Block)
Power Consumption	Max 143W @24VDC input (support up to 120W for PoE Output) (IGS-401F-4PH24) Max 143.4W @24VDC input (support up to 120W for PoE Output) (IGS-402F-4PH24)
PoE Power Output	Maximum PoE Output power budget 120W (30W/Per Port)
Alarm Relay Contact	Relay outputs with current carrying capacity of 1A @24VDC
Removable Terminal Block	Provide 2 Redundant power, Alarm relay contact, 6 Pin
Operating Temperature	-10 ~ 60°C (IGS-401F-4PH24, IGS-402F-4PH24) -40 ~ 75°C (IGS-401F-4PHE24, IGS-402F-4PHE24)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP30 Protection
Dimensions	106 x 62.5 x 134.8mm (D X W X H)
Weight	0.67kg (IGS-401F-4PH24), 0.68kg (IGS-402F-4PH24)
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
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
MTBF	316,408 Hours (IGS-401F-4PH24) 306,704 Hours (IGS-402F-4PH24)
Warranty	5 years

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

Application

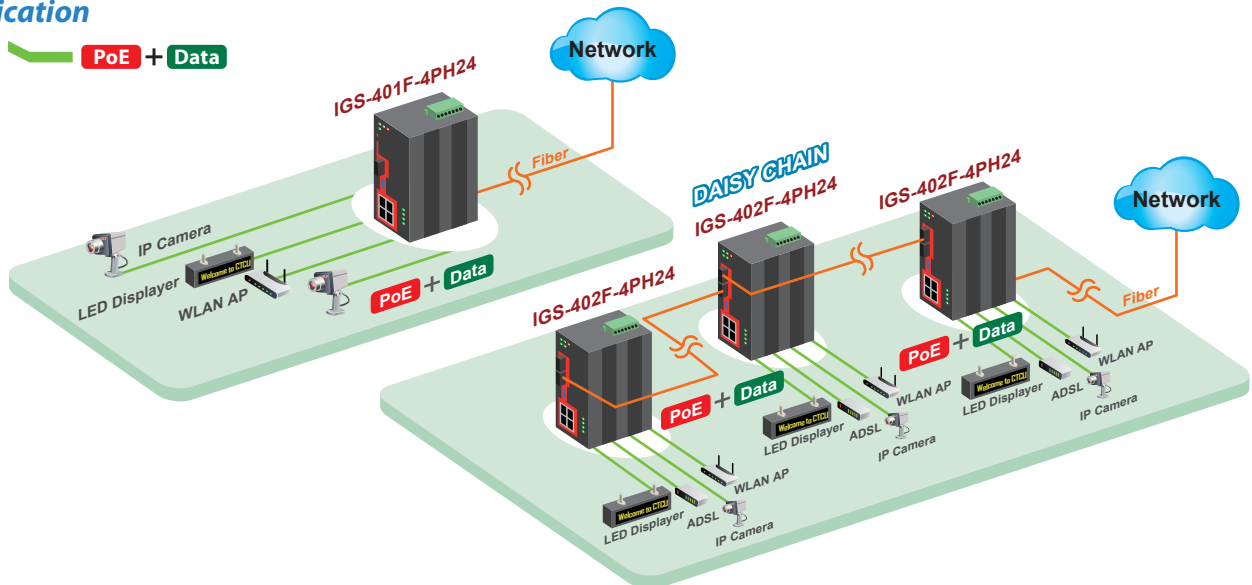
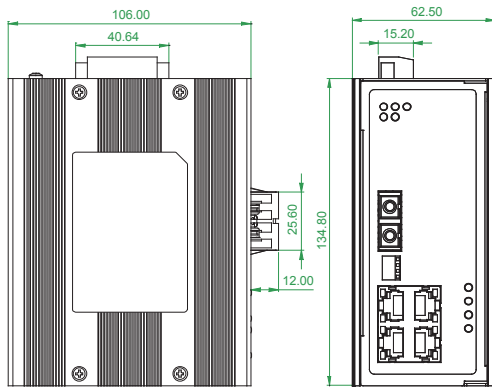


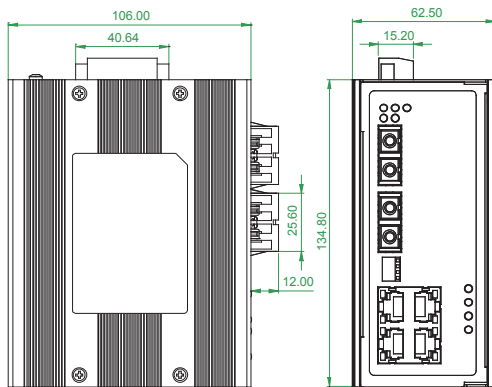
Figure : IGS-401F-4PH24 & IGS-402F-4PH24 PoE Gigabit Ethernet Switch Transmission

Dimensions

IGS-401F-4PH24

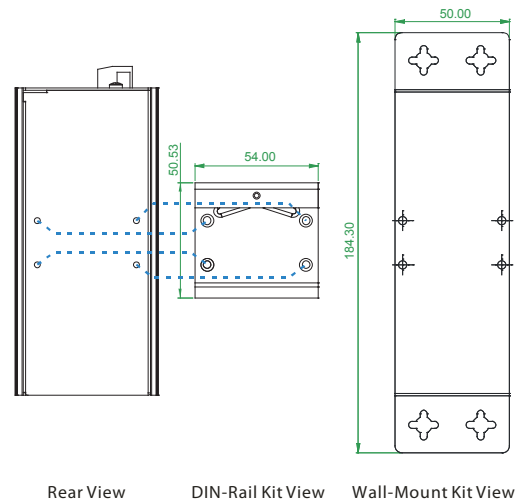


IGS-402F-4PH24



Side View

Front View



Rear View

DIN-Rail Kit View

Wall-Mount Kit View

Ordering Information

Model Name	Description
IGS-401F-4PH24	4-Port 10/100/1000Base-T + 1-Port 1000Base Fiber with 4-PoE Switch (30W/Per Port, Total 120W, 24V Booster) (-10 ~ 60°C)
IGS-401F-4PHE24	4-Port 10/100/1000Base-T + 1-Port 1000Base Fiber with 4-PoE Switch (30W/Per Port, Total 120W, 24V Booster) (-40 ~ 75°C)
IGS-402F-4PH24	4-Port 10/100/1000Base-T + 2-Port 1000Base Fiber with 4-PoE Switch (30W/Per Port, Total 120W, 24V Booster) (-10 ~ 60°C)
IGS-402F-4PHE24	4-Port 10/100/1000Base-T + 2-Port 1000Base Fiber with 4-PoE Switch (30W/Per Port, Total 120W, 24V Booster) (-40 ~ 75°C)

Fiber Connector Type	Connectivity Distance
SC	SC001: 500m (SC, M/M) SC002: 2km (SC, 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)

Port Number Temperature Connector Type Connectivity Distance
IGS - 40 **F - 4PH** **24** -
 Example: IGS - 401F - 4PHE24 - SC002

Accessories

DR-120-24	Industrial Power, Input 88 ~ 132VAC / 176 ~ 264VAC, Output 24VDC, 120W, -10 ~ +60°C
DRP-240-48	Industrial Power, Input 85 ~ 264VAC, Output 48VDC, 240W, -10 ~ +70°C