NEW

EN50121-4 EN61000-6-2 EN61000-6-4

IGS-501S
5x 10/100/1000Base-T + 1x 100/1000Base-X SFP

IGS-500
5x 10/100/1000Base-T

IGS-800
8x 10/100/1000Base-T

The series models are 5/8 port 10/100/1000Base-T Ethernet non-managed Gigabit switches, with either 1 or 0 port 1000Base-X SFP port, 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

- 5x 10/100/1000Base-T RJ-45 + 1x100/1000Base-X SFP (IGS-501S)
- 5x 10/100/1000Base-T RJ-45 (IGS-500)
- 8x 10/100/1000Base-T RJ-45 (IGS-800)
- Supports broadcast storm protection
- Supports power failure alarm message by relay
- Supports flow control
- Jumbo frame support
- Supports auto-negotiation and auto-MDI/MDI-X
- Redundant dual DC input power 12/24/48VDC (9.6~60VDC)
- IP30 rugged metal housing, Fanless
- Supports DIN Rail or wall mounting installation
- Wide operating temperature -40~75°C (-E model)
- EN50121-4, CE, FCC Certification
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified

Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet	
	IEEE 802.3u 100Base-TX, 100Base-FX, Fast Ethernet	
	IEEE 802.3ab 1000Base-T Gbit/s Ethernet over twisted pair	
	IEEE802.3x Flow Control	
	IEEE 802.3z 1000Base-X Gbit/s Ethernet over Fiber-Optic	
Switch Architecture	Back-plane (Switching Fabric): 12Gbps (IGS-501S) 10Gbps (IGS-500) 16Gbps (IGS-800)	
Data Processing	Store and Forward	
Flow Control	IEEE 802.3x flow control for Full duplex , back pressure for half duplex	
Provides Broadcast Storm Protection	Present	
Jumbo Frame	9.6KBytes	
MAC Address Table	8K	
Packet Buffer Size	128KByte	
Network Connector	5 x 10/100/1000Base-T RJ-45 (IGS-500,IGS-501S)	
	8 x 10/100/1000Base-T RJ-45 (IGS-800)	
	1x 100/1000Base-X SFP connector (only for IGS-501S)	
	10/100/1000Base-TX auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex	
Network Cable	10Base-T: 2-pair UTP/STP Cat. 5 cable	
	EIA/TIA-568 100-ohm (100m)	
	100Base-TX: 2-pair UTP/STP Cat. 5 cable	
	EIA/TIA-568 100-ohm (100m)	
	Fiber Cable (Multi-mode): 50/125um, 62.5/125um (only for IGS-501S)	
	Fiber Cable (Single-mode): 9/125um (only for IGS-501S)	
Protocols	CSMA/CD	
LED	Per unit: Power 1 (Green), Power 2 (Green), Fault (Amber)	
	Per RJ45 Link/Act 1000 (Yellow) Link/Act 10/100 (Green)	
	Fiber LED Link/Act (Green)	
DIP SW	DIP 1	ON : Disable
		OFF : Enable power failure alarm
	DIP 2	ON : Disables broadcast storm protection
		OFF : Enable broadcast storm protection
	DIP 3	Green Ethernet
		ON : Disable Green Ethernet
		OFF : Enable 802.3az Green Ethernet
	DIP 4	SFP speed (only for IGS-501S)
		ON : 100M OFF : 1000M
Reserve Polarity Protection	Present for Power Input	
Overload Current Protection	Present	

Power Supply	Redundant Dual DC 12/24/48V (9.6~60VDC), or AC 24V (18~36VAC) Input power (Removable Terminal Block)
	Provide DC Power JACK adapter cable for external power supply

Power Consumption

Input	IGS-500	IGS-501S	IGS-800
12VDC	3.3W	3.9W	7.0W
24VDC	3.4W	3.9W	7.0W
48VDC	4.8W	5.3W	8.7W

Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC, NC
Removable Terminal Block	Provide 2 redundant power, alarm relay contact, 6 Pin
Operating Temperature	-10°C~60°C (IGS-501S, IGS-500, IGS-800)
	-40°C~75°C (IGS-501S-E, IGS-500-E, IGS-800-E)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal,IP30Protection and fanless
Dimensions	106 x 31.6 x 142 mm (D x W x H)
Weight	0.415kg (IGS-501S) 0.41kg (IGS-500) 0.44kg (IGS-800)
Installation Mounting	DIN Rail mounting or wall mounting
MTBF	569,039hrs (IGS-501S) 612,034hrs (IGS-500) 301,121hrs (IGS-800) (MIL-HDBK-217)
Warranty	5 years
Certification	
EMC/EMS	CE
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A,CE EN55022 Class A
Railway Traffic	EN50121-4
Immunity for Heavy Industrial Environment	EN61000-6-2
Emission for Heavy Industrial Environment	EN61000-6-4
EMS	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

Application

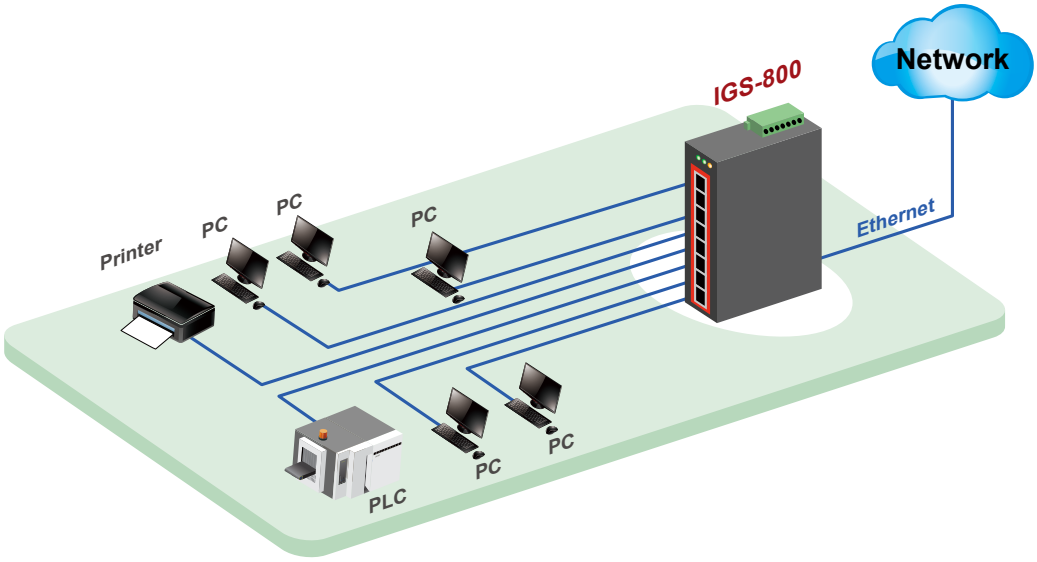
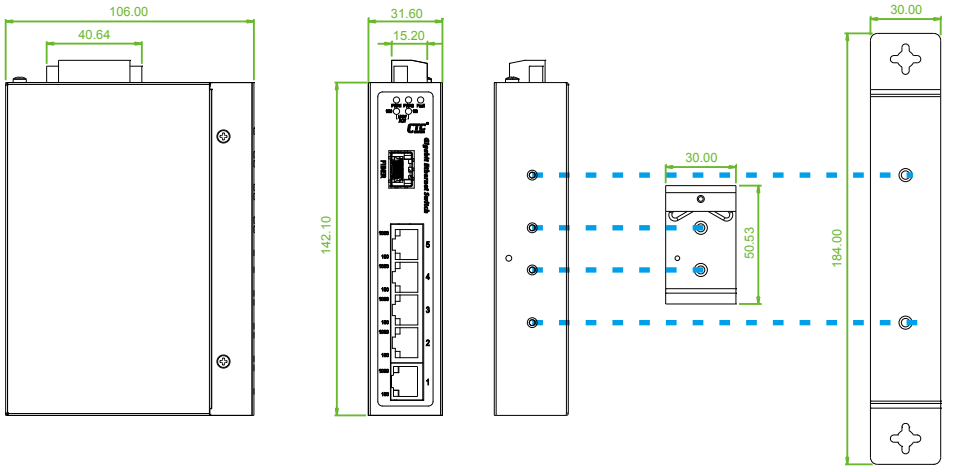


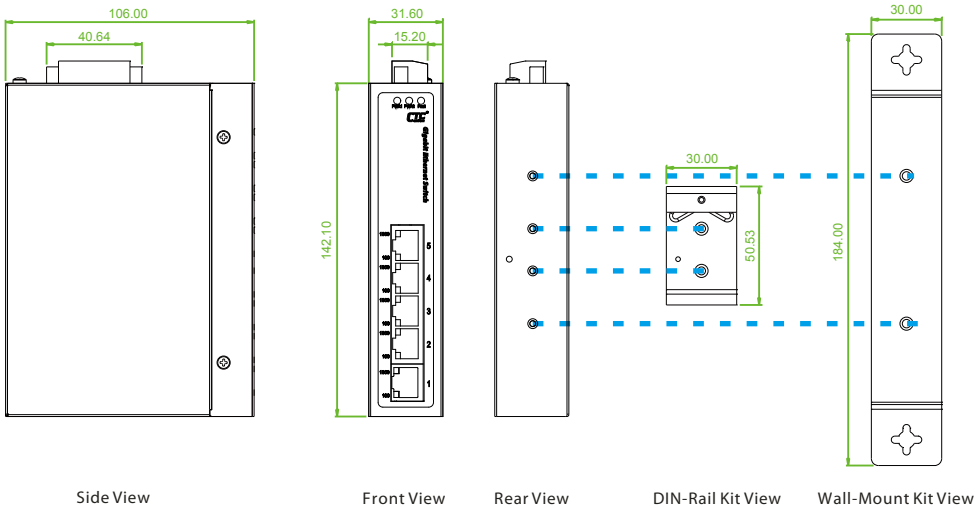
Figure : IGS-800 Gigabit Ethernet Switch Transmission

Dimensions

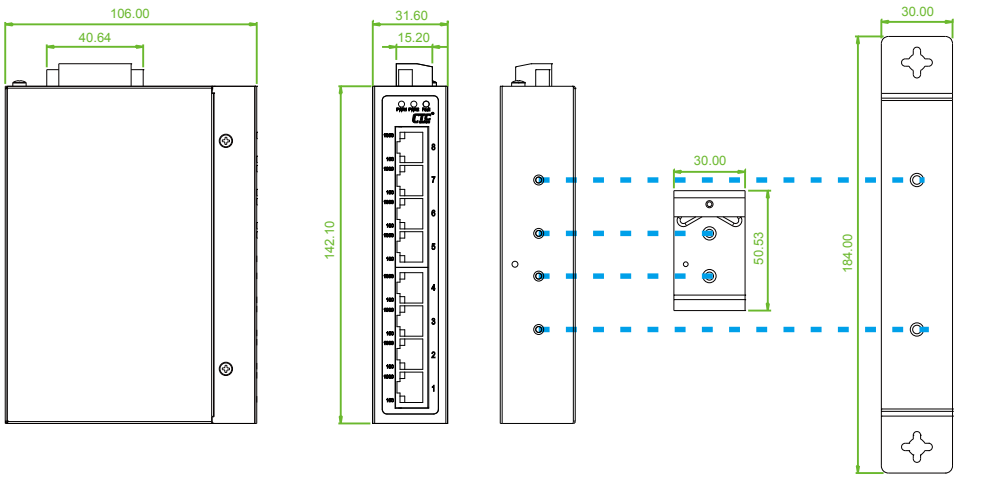
IGS-501S



IGS-500



IGS-800



Side View | Front View | Rear View | DIN-Rail Kit View | Wall-Mount Kit View

Ordering Information

Model Name	Total Port	UTP Port	Fiber Port	Certification				Operating Temperture
		10/100/1000 Base-T	100/1000Base-X	Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE	FCC	
IGS-501S	6	5	1x SFP	V	V	V	V	-10~60 C
IGS-501S-E	6	5	1x SFP	V	V	V	V	-40~75 C
IGS-500	5	5	—	V	V	V	V	-10~60 C
IGS-500-E	5	5	—	V	V	V	V	-40~75 C
IGS-800	8	8	—	V	V	V	V	-10~60 C
IGS-800-E	8	8	—	V	V	V	V	-40~75 C

Model Naming Rule

IGS – 5 – 01S – E

- IGS: Industrial Gigabit Switch
- 5: 5x UTP; 8: 8x UTP
- 01S: 1x SFP; 00: 0x SFP
- E: -40~75°C; Blank: -10~60°C

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
SFP	Transceiver Compatible, Reliable, 5-year Warranty

Temperature

IGS – 500 – ☐

Example: IGS – 500 – E

SFP Naming Rule

ISFP – M – 7 – 040 – 31 – E

- ISFP: Industrial SFP Transceiver
- M: Multi Mode; S: Single Mode; T: Copper
- 7: GbE; 5: FE
- Distance: 002(2km); 020(20km),040(40km)
- Wavelength: 31
- E: -40~85°C; Blank: 0~70°C