



IGS-500

5x 10/100/1000Base-T

IGS-501S

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

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 (IGS-500)
- 5x 10/100/1000Base-T RJ-45 + 1x100/1000Base-X SFP (IGS-501S)
- 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 supports
- 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): 10Gbps (IGS-500) 12Gbps (IGS-501S) 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	512KByte
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 Green Ethernet DIP 3 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	<table border="1"> <thead> <tr> <th>Input</th> <th>IGS-500</th> <th>IGS-501S</th> <th>IGS-800</th> </tr> </thead> <tbody> <tr> <td>12VDC</td> <td>3.3W</td> <td>3.9W</td> <td>7.0W</td> </tr> <tr> <td>24VDC</td> <td>3.4W</td> <td>3.9W</td> <td>7.0W</td> </tr> <tr> <td>48VDC</td> <td>4.8W</td> <td>5.3W</td> <td>8.7W</td> </tr> </tbody> </table>	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
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-500, IGS-501S, IGS-800) -40°C~75°C (IGS-500-E, IGS-501S-E, IGS-800-E)																
Operating Humidity	5% to 95% (Non-condensing)																
Storage Temperature	-40 ~ 85°C																
Housing	Rugged Metal, IP30 Protection, and fanless																
Dimensions	106 x 38.6 x 142 mm (D x W x H)																
Weight	0.41kg (IGS-500) 0.415kg (IGS-501S) 0.44kg (IGS-800)																
Installation Mounting	DIN Rail mounting or wall mounting																
MTBF	612,034hrs (IGS-500) 569,039hrs (IGS-501S) 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

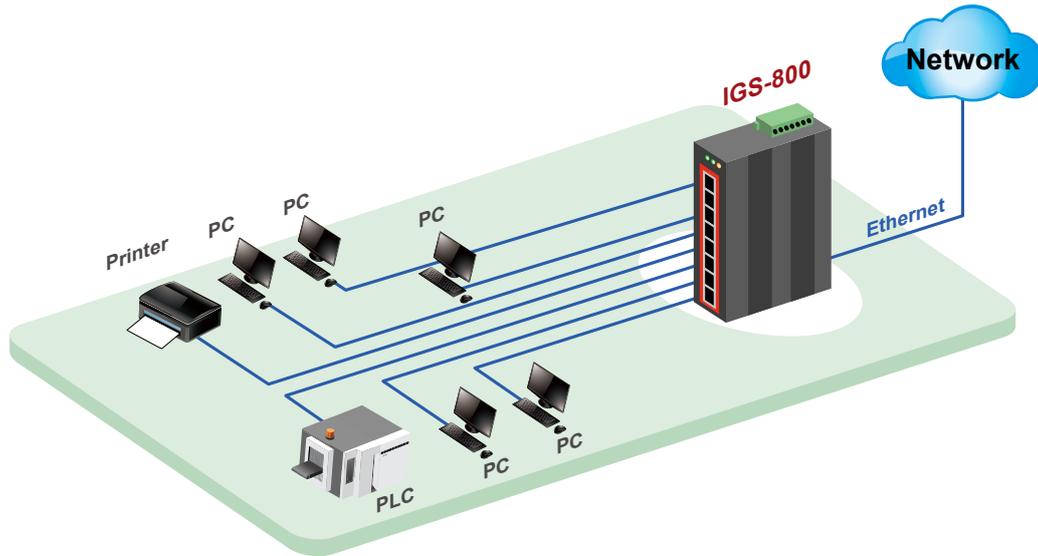
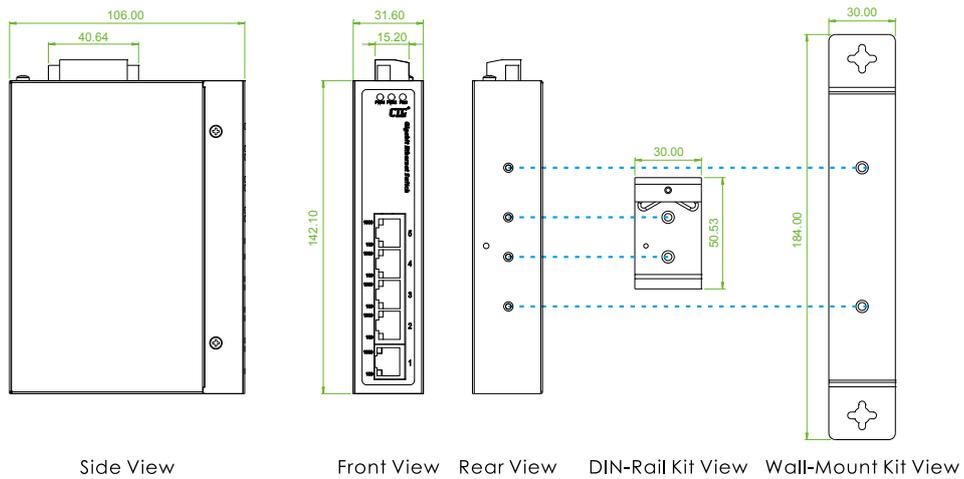


Figure : IGS-800 Gigabit Ethernet Switch Transmission

Dimensions

IGS-500



Side View

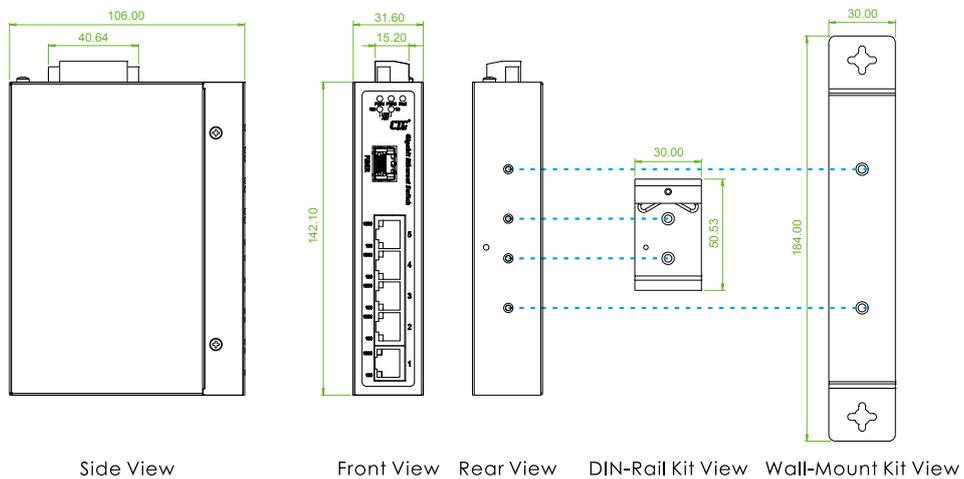
Front View

Rear View

DIN-Rail Kit View

Wall-Mount Kit View

IGS-501S



Side View

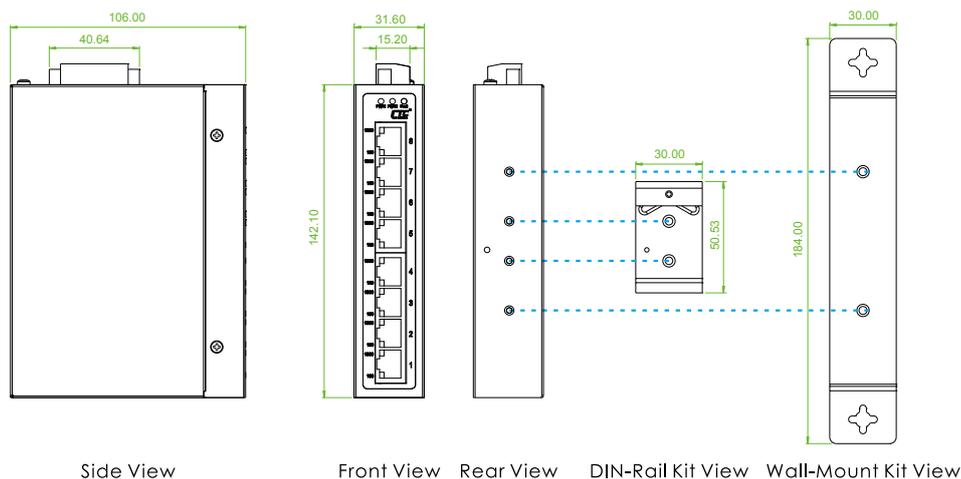
Front View

Rear View

DIN-Rail Kit View

Wall-Mount Kit View

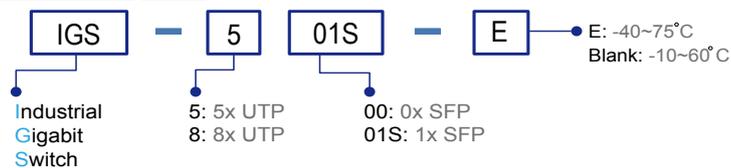
IGS-800



Ordering Information

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

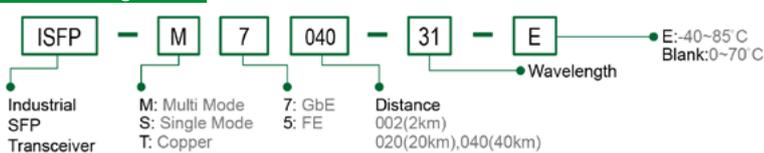
Model Naming Rule



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

SFP Naming Rule



Temperature
IGS - 500 -
 Example: IGS - 500 - E