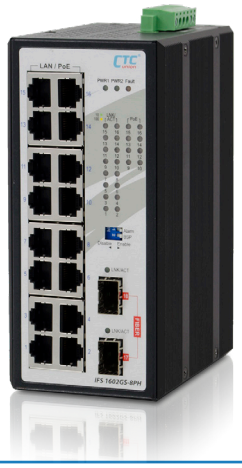
IFS-1602GS-8PH

16x FE RJ45 + 2x 1000 SFP with 8x PoE 240W, 48VDC

- 4KV surge protection for PoE UTP and PoE ports
- Wide operating temperature -40 ~ 75° C
- IP30 rugged metal housing and fanless
- EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC certified



The industrial PoE Ethernet switch, unmanaged plug-and-play easy for use, has 16 10/100 UTP ports of which 8 PoE ports support the IEEE802.3af/at standard, each port supports 30W PoE+. Equipped with two Gigabit SFP slots for fiber optic connections to meet the requirements for extended transmission distance, fanless design, high MTBF, supports wide operating temperature, redundant 48VDC power input, suitable for heavy-duty applications in harsh environments, such as industrial factory automations, data centers, intelligent transportation systems, military and utility market applications where environmental conditions exceed commercial product specifications.

Features

- Provides 8-port IEEE 802.3at/af PoE output (30W/Per Port)
- Maximum PoE output power budget 240W
- 48VDC (44~57VDC) redundant dual input power
- Supports power failure alarm message by relay
- Supports flow control
- Provides broadcast storm protection
- DIN Rail mounting or wall mounting

Specifications

Standard	IEEE 802.3	10Base-T Ethernet
	IEEE 802.3u	100Base-TX Fast Ethernet
	IEEE 802.3z	1000Base-X Gigabit Ethernet over fiber optical
	IEEE 802.3x	Flow Control and Back Pressure
	IEEE 802.3af	PoE (Power over Ethernet)
	IEEE 802.3at	PoE+ (Power over Ethernet enhancements)
Switch Architecture	Back-Plane (Switching Fabric): 7.2Gbps (Full Wire-Speed)	
Data Processing	Store and Forward	
Flow Control	IEEE 802.3x flow control, back pressure flow control	
MAC Address Table	16K	
Packet Buffer Size	4Mbits	
Max Frame Size	1664 Bytes	
Jumbo Frame	16K Byte	
PoE standard	IEEE 802.3at/af	
PoE RJ-45 pin Assignment	RJ-45 port #9~# 16 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)	
Network Connector	16x RJ-45 for 10/100Base-TX, Auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex	
	2x 1000Base-X SFP	

Network Cable	UTP/STP Cat. 5e cable or above	
	EIA/TIA-568 100-ohm (100meter)	
	Fiber Cable (Multi-mode): 50/125um, 62.5/125um / Fiber Cable (Single-mode): 9/125um	
Protocols	CSMA/CD	
LED	System: Power 1 (Green), Power 2 (Green), Fault (Amber)	
	UTP: 10 Link/Active (Green), 100 Link/Active (Yellow)	
	SFP Slot: Link/Active (Green)	
	PoE: ON (Green)	
DIP SW	DIP 1	Power failure alarm
		OFF : Enable ON : Disable
	DIP 2	Broadcast Protection
		OFF : Enable ON : Disable
Reverse Polarity Protection	Supported for Power Input	
Overload Current Protection	Supported	
Power Supply	Redundant dual 48VDC (44~57VDC) input power (Removable terminal block) (50~57V input is recommended for IEEE802.3at in 30W applications)	

Power Consumption

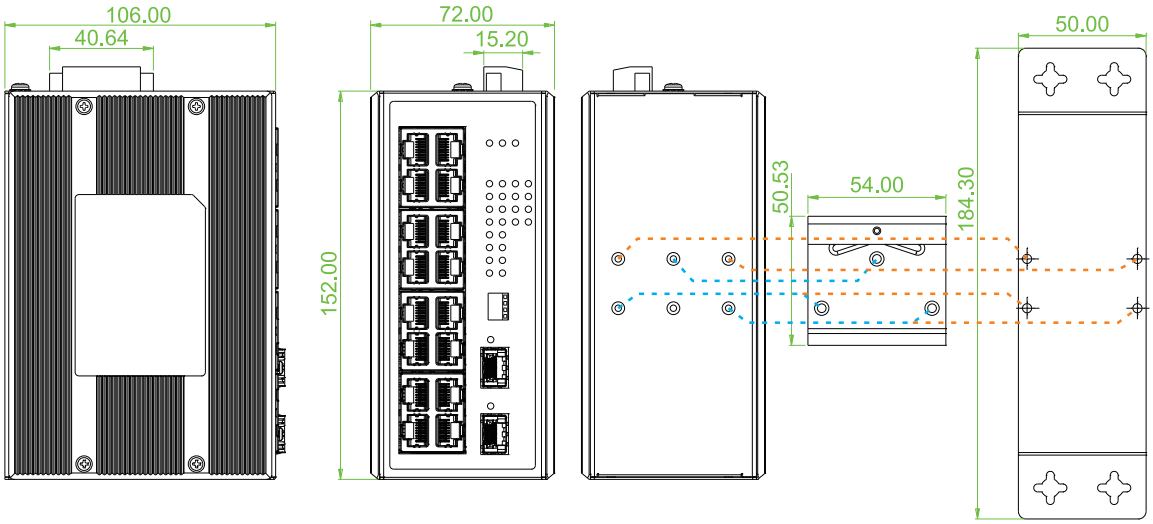
Input Voltage	Total Power Consumption	Device Power Consumption	PoE Budget
50 VDC	253.2W	8.9W	240W

PoE Power Budget	Maximum PoE Output power budget 240W (30W/Per Port)
Alarm Relay Contact	Relay outputs with current carrying capacity of 1A @24VDC
Removable Terminal Block	Provides 2 Redundant power, Alarm relay contact, 6 Pin
Operating Temperature	-10 ~ 60°C (IFS-1602GS-8PH)
	-40 ~ 75°C (IFS-1602GS-8PHE)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged metal, IP30 Protection and fanless
Dimensions	106 x 72 x 152 mm (D X W X H)
Weight	850g
Installation Mounting	DIN Rail mounting, or wall mounting (Optional)
MTBF	493,382Hours (MIL-HDBK-217)
Warranty	5 years

Certification

EMC	CE
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE
EMS (Electromagnetic Susceptibility) Protection Level	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
Railway Traffic	EN50121-4
Immunity for Heavy Industrial Environment	EN61000-6-2
Emission for Heavy Industrial Environment	EN61000-6-4
4KV Surge Protection	Supported for PoE, UTP and SFP port
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Dimensions



Side View | Front View | Rear View | DIN-Rail Kit View | Wall-Mount Kit View (Optional Accessory)

Ordering Information

Model Name	Total Port	RJ45 UTP Port	Fiber Port	PoE Port		Input Power	Certification			Operating Temperature
		10/100 Base-T(X)	1000 Base-X	IEEE802.3 at/af	Power Budget	Redundant	EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC	
IFS-1602GS-8PH	18	16	2 SFP	8	240W	48VDC	V	V	V	-10~60°C
IFS-1602GS-8PHE	10	8	2 SFP	8	240W	48VDC	V	V	V	-40~75°C

Optional Accessories

Wall Mount Kit

IND-WMK02	Wall Mount kit for Industrial product (Wide) (184 x 50mm)

Industrial SFP Transceiver

The ISFP series of industrial grade SFP modules have been fully tested with all CTC Union industrial grade Ethernet switches for guaranteed compatibility and performance. Best performance can be guaranteed, even in mission-critical applications. (Please see CTC Union's Industrial SFP datasheets for more items and detailed information.)

ISFP-M7000-85-D(E)	Industrial SFP GbE 1000Base-SX, M/M, 500 meter,wave length 850nm, 7.5dB, LC, DDMI, -10~70°C (-40~85°C)
ISFP-S7020-31-D(E)	Industrial SFP 1000Base-LX, S/M, 20km, wave length 1310nm, 15dB, LC, DDMI, -10~70°C (-40~85°C)
ISFP-T7T00-00-(E)	Industrial SFP 10/100/1000Base-T UTP 100meter, -10~70°C (-40~85°C)

Industrial Power Supply

NDR-240-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 240W, -20 ~ +70°C
NDR-480-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 480W, -20 ~ +70°C