



16-port Unmanaged Industrial PoE Switch

TI-1016GP

16-port Unmanaged Industrial Ethernet PoE Switch

Temperature hardened and increased surge protection

Overview

Teroline's TI-1016GP is an unmanaged Industrial Ethernet PoE Switch with 16 x 10/100/1000Base-T 802.3af/at PoE ports. It is featured with port isolation, 250m long-range transmission, QoS (1-2 ports) and PoE watchdog functions, which can be easily configured by a DIP switch on the top panel.

TI-1016GP is an ideal and cost-effective solution for industrial automation applications. It's designed with input 44-57VDC, redundant inputs with polarity reverse and over-voltage protection, enclosed in a robust IP40 fan-less housing with DIN-rail installation clamp to support extended operation temperature from -40°C to 75°C as well as enhanced EMI/EMC capability. It is easy and fast to deploy in manufacturing facilities, transportation, oil & gas, chemistry, video surveillance and other various industry automation networks in which the operation condition is harsh and electromagnetic compatibility must be fulfilled.

Key features

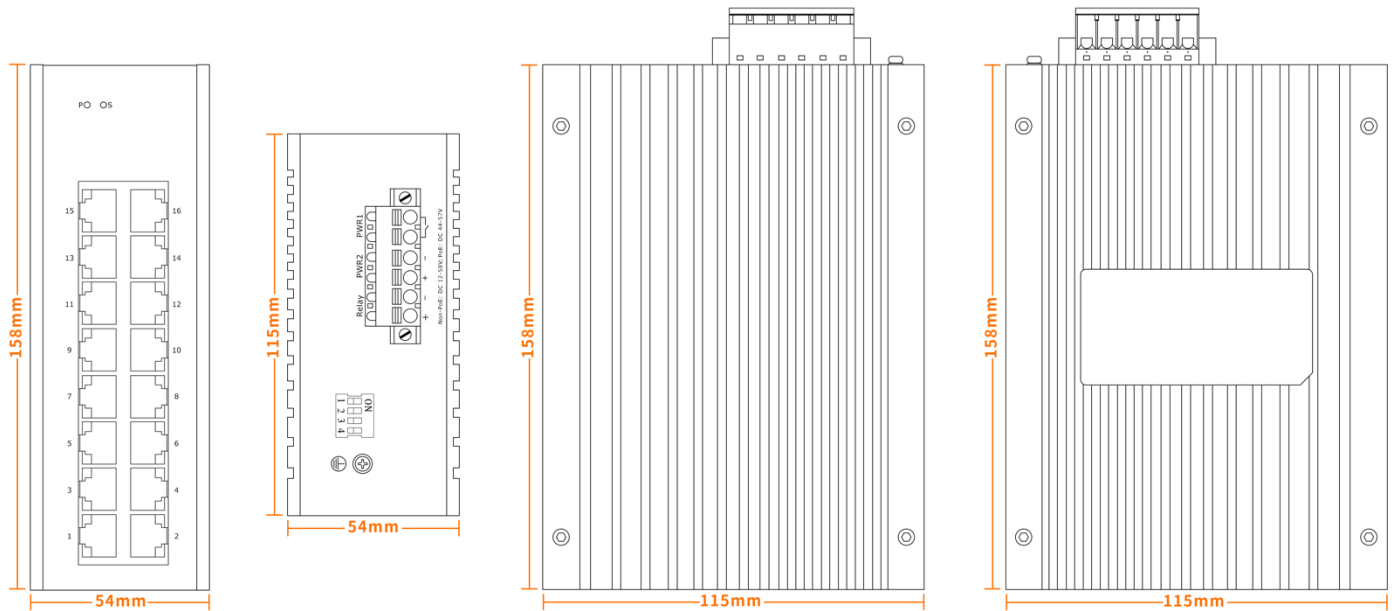
- > 16 x 10/100/1000BASE-T RJ45 PoE interfaces with auto MDI/MDI-X function
- > DIP-switch configuration for Port Isolation, 250m long-range transmission, QoS and PoE watchdog functions
- > IEEE802.3af PoE and IEEE802.3at PoE+ standards
- > Up to 10K Bytes Jumbo Frame support
- > IP40 protection level, Fan-less design, and DIN-rail mounted
- > 6KV surge protection; ESD: 8KV/contact, 15KV/air protection
- > Dual redundant DC44-57V inputs, with reverse & over-voltage protection
- > Operation temperature from -40 to +75°C

Specifications

Interface Specifications	Fiber port	None	
	Copper port	16 *10/100/1000Base-T PoE (RJ45)	
Power Specifications	Alarm output	Alarm output for power failure, 1A@24VDC	
	Input voltage	44-57VDC, redundant inputs	
	Input current	5.6A max	
	Power consumption	≤ 8W without PoE (full load) ≤ 240W with PoE (full load)	
	Power interface	6-pin terminal block (Pin 5 & 6 for alarm output)	
	Reverse polarity protection	Supported	
	Over-voltage protection	Supported	
	Over-current protection	Supported	
	LED Indicators	1 – PWR (Green)	Power on indicator
		2 – SYS (Red)	PoE working status indicator
3 – LNK/ACT (Green)		RJ45 port link up/down/act indicator per port	
4 – SPEED (Yellow)		RJ45 port speed indicator per port	
DIP Switch	1 – Port Isolation	Port Isolation function on/off	
	2 – 250m long-range	Port 1-4 long-range 250m transmission on/off	
	3 – QoS (1-2 ports)	Port 1-2 QoS function on/off	
	4 – PoE watchdog	Power over Ethernet watchdog on/off	
Switching features	Switching capacity	32Gbps	
	Packet forwarding rate	47.6Mpps	
	MAC address table	8K	
	VLAN	4K	
	Buffer	2M	
	Forwarding delay	< 5us	
	Jumbo frame	10K bytes	
	Auto MDI/MDIX	Supported	
	Watchdog	Supported	
	Standards	IEEE 802.3	10BASE-T
IEEE 802.3u		100BASE-TX	
IEEE 802.3ab		1000BASE-T	
IEEE 802.3x		Full-duplex flow control	
IEEE 802.3az		Energy Efficient Ethernet	
IEEE 802.3af		Power over Ethernet	
IEEE 802.3at		Power over Ethernet plus PSE	
Environment		Operating temperature	-40°C to +75°C
	Storage temperature	-40°C to +85°C	
	Relative humidity	5% to 95% (non-condensing)	
	Thermal design	Fan-less, natural heat dissipation	
	MTBF	100,000 hours	
Standards compliance	Power surge protection	IEC 61000-4-5 (6KV/4KV) (8/20us)	
	Ethernet port surge protection	IEC 61000-4-5 (6KV/2KV) (10/700us)	
	EMI	FCC Part 15B Class A	
	ESD	IEC 61000-4-2 Level 4 (8K/15K)	

	RS	IEC 61000-4-3 80MHz-1GHz: 10V/m
	EFT	IEC 61000-4-4 power port: 4K, Eth port: 2K
	CS	IEC 61000-4-6: 10V
	Shock	IEC 60068-2-27
	Free fall	IEC 60068-2-32
	Vibration	IEC 60068-2-6
	Certifications	CE, FCC, RoHS
Physical parameters	Dimensions	54(W)*115(D)*158(H)mm
	Weight	Net weight 1.39KG
	Protection Level	IP40
	Installation Method	DIN-Rail

Physical dimensions



Ordering information

Model	Description
TI-1016GP	16-port 10/100/1000Base-T unmanaged Industrial Ethernet PoE switch, IEEE 802.3af/at compliant, DC44-57V input, dual redundant power inputs, Din-rail, operation temperature: -40°C to +75°C