



TI-2016GP-2DGS

18-port Managed Industrial Ethernet **PoE Switch**

2.5Gbps fiber uplink interfaces with alarm output interface

Overview

Teroline's TI-2016GP-2DGS is a Managed Industrial Ethernet Switch with 16 x 10/100/1000Base-T 802.3af/at PoE ports, 2 x 1000/2500Base-X ports. It is featured with full L2 features such as VLAN, QoS, IGMP, Port Mirroring, LLDP, security, ring protection and IPv4/6 based network management.

TI-2016GP-2DGS is an ideal solution 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 a powerful and easy-to-deploy solution for most industrial environment, such as manufacturing, transportation, electricity, oil & gas, chemistry, video surveillance and other various industry automation networks.

Key features

- 2 x 1000/2500Base-X SFP fiber interfaces and 8 x 10/100/1000BASE-T RJ45 PoE LAN interfaces, one Digital Output port for alarm relay
- Full L2 switching functions and network management
- ITU-T G.8032 standard ERPS Ring with sub-20ms switchover time
- 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

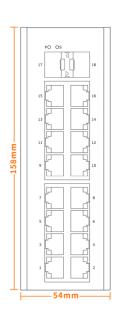
Input voltage	Interface Specifications	Fiber port	2 * 1000/2500Base-X SFP
Alarm Relay 1 ° Digital Output for alarm relay, 1A@24VDC Power Input voltage 44-57VDC, redundant inputs Input current 5.8A max	•	Copper port	16 * 10/100/1000Base-T PoE (RJ45)
Input voltage		Management Port	1 * RJ45 Console
Input current S.8A max Power consumption \$15W without PoE (full load) \$240W with PoE (full load) \$240W working status indicator \$250W orking		Alarm Relay	1 * Digital Output for alarm relay, 1A@24VDC
Power consumption Power interface Reverse polarity protection Over-voltage p	Power Specifications	Input voltage	44-57VDC, redundant inputs
S 240W with PoE (full load) Power interface Reverse polarity protection Supported Over-voltage protection Supported Over-undrage protection Supported Over-undrage protection Supported Over-undrage protection Supported Deferminal block, Pin 5 & 6 for alarm relay Supported Supported LED Indicators 1 - PWR (Green) Power on indicator 2 - SYS (Green) 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 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 4 - SPEED (Yellow) RJ45 port speed indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 4 - SPEED (Yellow) RJ45 port speed indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 4 - SPEED (Yellow) RJ45 port speed indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 6 - LNK/ACT (Green) SFP port link up/down/act indicator per port 6 - LNK/ACT (Green) SFP port link up/down/act indicator per port 7 - LNK/ACT (Green) SFP port link up/down/act indicator per port 8 - LNK/ACT (Green) SFP port link up/down/act indicator per port 8 - LNK/ACT (Green) SFP port link up/down/act indicator per port 9 - LNK/ACT (Green) SFP port link up/down/act indicator 9 - LNK/ACT (Green) SFP port link up/down/act indicator 9 - LNK/ACT (Green) SFP port link up/down/act indicator 9 - LNK/ACT (Green) SFP port link up/down/act indicator 9 - LNK/ACT (Green) SFP port link up/down/act indicator 9 - LNK/ACT (Green) SFP port link up/down/act indicator 9	•	Input current	5.8A max
Reverse polarity protection Over-voltage protection Over-current protection Over-current protection Supported Defense System 1 - PWR (Green) Power on indicator 2 - SYS (Green) PoE working status indicator 4 - SPEED (Yellow) RJ45 port link up/down/act indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port 5 - LNK/ACT (Green) SFP port link up/down/act indicator per port Specifications Switching capacity 42Gbps Packet forwarding rate MAC address table MAC address table MAC address table MAC Buffer 12Mb Forwarding delay Supported Jumbo frame 10K bytes Auto MDI/MDIX Supported Watchdog Supported L2 Switching Link Aggregation Static and dynamic Link Aggregation Port-based Features IEEE 802.3x flow control Port-based traffic statistics Port isolation Broadcast storm control VLAN Access, trunk and hybrid mode Port-based Q-in-Q Flexible Q-in-Q		Power consumption	·
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Over-current protection Supported		Reverse polarity protection	Supported
LED Indicators 1 - PWR (Green) 2 - SYS (Green) 3 - LNK/ACT (Green) 4 - SPEED (Yellow) 5 - LNK/ACT (Green) 8 - MAC address table WLAN Buffer 1 - Matchdog 1 - Matchdog 1 - Switching delay 1 - Supported Watchdog 2 - Supported Watchdog 3 - Supported Watchdog 4 - Supported Watchdog 4 - Supported Watchdog 5 - Supported 6 - Supported 6 - Supported 7 - Supported 8 - Supported 9 - Suppo		Over-voltage protection	Supported
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ACL ACL policies based on MAC/IP Quality of Service (QoS) Ingress port-based rate-limiting Egress port-based rate-limiting QoS class remarking		- -	
Quality of Service (QoS) Ingress port-based rate-limiting Egress port-based rate-limiting QoS class remarking		ACL	<u> </u>
Support policy-based OoS			Ingress port-based rate-limiting Egress port-based rate-limiting QoS class remarking
Support policy based QoS			Support policy-based QoS

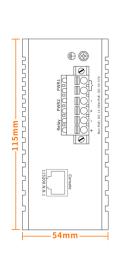
		SP and WRR queue scheduling
	Security	IEEE 802.1x port/MAC authentication
	Security	RADIUS
		IP Source Guard, port/MAC/IP binding
		ARP inspection and filtering
	Management and	HTTP/HTTPS web management
	Maintenance	SNMPv1/v2c/v3 support
	Manitenance	Support IPv6 for management
		Syslog and alarm classification
		Support RMON
		Support LLDP
		Support NTP
		Support optic transceiver DDM
		Support Ping/Tracert for diagnosis
		Support Telnet and SSH connection
		Support PoE management
		Support TFTP and web for upgrade
Standards	IEEE 802.3	10BASE-T
	IEEE 802.3u	100BASE-TX
	IEEE 802.3ab	1000BASE-T
	IEEE 802.3z	1000Base-X
	IEEE 802.3x	Full-duplex flow control
	IEEE 802.1d/w	Spanning Tree/Rapid Spanning Tree
	IEEE 802.1Q	VLAN
	IEEE 802.1X	Port Authentication
	IEEE 802.1ab	LLDP
	IEEE 802.3ad	LACP
	ITU-T G.8032	ERPS
	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	Power surge protection	IEC 61000-4-5 (6KV/4KV) (8/20us)
compliance	3 1	, ,,
	Ethernet port surge	IEC 61000-4-5 (6KV/2KV) (10/700us)
	protection	
	ESD	IEC 61000-4-2 Level 4 (8K/15K)
	RS	IEC 61000-4-3 80MHz-1GHz: 10V/m
	EFT	IEC 61000-4-4 4K/2K
	CS	IEC 61000-4-6 10V
	Shock	IEC 60068-2-27
	Free fall	IEC 60068-2-32
	Vibration	IEC 60068-2-6
	EMI	FCC Part 15B Class A
	Certifications	CE, FCC, RoHS
Physical	Dimensions	54(W)*115(D)*158(H)mm
parameters		· · · · · · · · · · · · · · · · · · ·
<u>-</u>	Weight	Net weight 1.43KG
	Protection Level	IP40

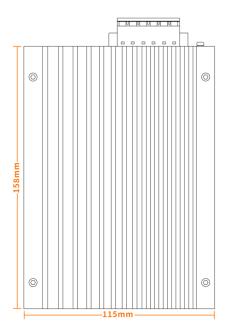


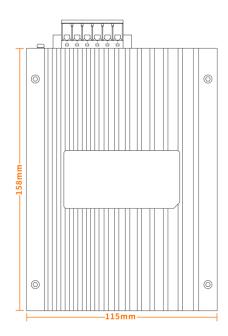
	Installation Method	DIN-Rail	
Warranty	Standard Warranty	5 years	

Physical dimensions









Ordering information

Model	Description
TI-2016GP-2DGS	Managed Industrial Ethernet PoE Switch, 16x10/100/1000Base-T RJ45 PoE +
	2x1000/2500Base-X SFP ports, IEEE 802.3af/at compliant, DC44-57V dual
	redundant power inputs, Din-rail, operation temperature: -40°C to +75°C