



TI-1008G-2GS

10-port Unmanaged Industrial Ethernet Switch

Temperature hardened and increased surge protection

Overview

Teroline's TI-1008G-2GS is an unmanaged Industrial Ethernet Switch with 8 x 10/100/1000Base-T RJ45 and 2 x 1000Base-X SFP ports. It is featured with port isolation, flow control, QoS (1-2 ports) and broadcast storm control functions, which can be easily configured by a DIP switch on the top panel.

TI-1008G-2GS is an ideal and cost-effective solution for industrial automation applications. It's designed with a wide-range power input 12-58VDC, redundant inputs with polarity reverse and over-voltage protection, enclosed in a robust IP40 fan-less housing with DINrail 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

- > 2 x 1000Base-X SFP fiber interfaces and 8 x 10/100/1000BASE-T RJ45 interfaces with auto MDI/MDI-X function
- > DIP-switch configuration for Port Isolation, Flow Control, QoS and Broadcast Storm **Control functions**
- Up to 10K Bytes Jumbo frame support
- IP40 protection level, Fan-less design, and DIN-rail mounted
- 4KV surge protection; ESD: 8KV/contact, 15KV/air protection
- Dual redundant wide-range DC12-58V inputs, with reverse & over-voltage protection
- Operation temperature from -40 to +75°C





Specifications

Interface Specifications	Fiber port:	2 * 1000Base-X SFP
	Copper port:	8 * 10/100/1000Base-T (RJ45)
Power Specifications	Input voltage:	12-58VDC, redundant inputs
	Input current	0.6A max
	Power consumption	≤ 7.5W (full load)
	Power interface	4-pin terminal block
	Reverse polarity protection	Supported
	Over-voltage protection	Supported
LED Indicators	1 – PWR (Green)	Power on indicator
	2 – SYS (Red)	Device working status indicator
	3 – LNK/ACT (Green)	RJ45 port link up/down/act indicator
	4 – SPEED (Yellow)	RJ45 port speed indicator
	5 – LNK/ACT (Green)	SFP port link up/down/act indicator
DIP Switch	1 – Port Isolation	Port Isolation function on/off (Port 8 as WAN)
	2 – Flow Control	Flow Control function on/off
	3 – QoS (1-2 ports)	Port 1-2 QoS function on/off
	4 – Broadcast Control	Broadcast storm control on/off
Switching features	Switching capacity	20Gbps
	Packet forwarding rate	29.7Mpps
	MAC address table	16K
	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 003 3-4	
	IEEE 802.3ab	1000BASE-T
	IEEE 802.3ab	Full-duplex flow control
Environment	IEEE 802.3x	Full-duplex flow control
Environment	IEEE 802.3x IEEE 802.3az	Full-duplex flow control Energy Efficient Ethernet
Environment	IEEE 802.3x IEEE 802.3az Operating temperature	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C
Environment	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C
Environment	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing)
Standards	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity Thermal design	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing) Fan-less, natural heat dissipation
Standards	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity Thermal design MTBF	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing) Fan-less, natural heat dissipation 100,000 hours
Standards	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity Thermal design MTBF Power surge protection Ethernet port surge	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing) Fan-less, natural heat dissipation 100,000 hours IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us)
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Standards	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity Thermal design MTBF Power surge protection Ethernet port surge protection DIP	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing) Fan-less, natural heat dissipation 100,000 hours IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us) IEC 61000-4-11 Level 3 (10V)
Standards	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity Thermal design MTBF Power surge protection Ethernet port surge protection DIP ESD	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing) Fan-less, natural heat dissipation 100,000 hours IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us) IEC 61000-4-11 Level 3 (10V) IEC 61000-4-2 Level 4 (8K/15K)
Standards	IEEE 802.3x IEEE 802.3az Operating temperature Storage temperature Relative humidity Thermal design MTBF Power surge protection Ethernet port surge protection DIP ESD Shock	Full-duplex flow control Energy Efficient Ethernet -40°C to +75°C -40°C to +85°C 5% to 95% (non-condensing) Fan-less, natural heat dissipation 100,000 hours IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us) IEC 61000-4-11 Level 3 (10V) IEC 61000-4-2 Level 4 (8K/15K) IEC 60068-2-27

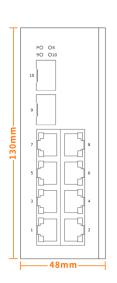


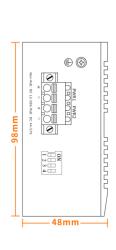
Product Datasheet 3

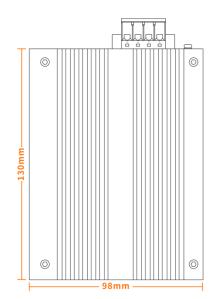


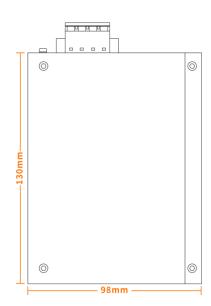
Physical parameters	Dimensions	48(W)*98(D)*130(H)mm	
	Weight	Net weight 0.70KG	
	Protection Level	IP40	
	Installation Method	DIN-Rail	

Physical dimensions









Ordering information

Model	Description
TI-1008G-2GS	Unmanaged Industrial Ethernet switch, 8x10/100/1000Base-T RJ45 +
	2x1000Base-X SFP ports, DC12-58V input, dual redundant power inputs, Din-
	rail, operation temperature: -40°C to +75°C