



12-port Managed Industrial Switch

TI-2008G-4DGS-D

12-port Managed Industrial Ethernet Switch

2.5Gbps fiber uplink interfaces with data interfaces

Overview

Teroline's TI-2008G-4DGS-D is a Managed Industrial Ethernet Switch with 8 x 10/100/1000Base-T ports, 4 x 1GbE/2.5GbE SFP ports, DI/DO/RS485/Modbus data port as well as a USB port for configuration and firmware upgrade. 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-2008G-4DGS-D is an ideal solution designed with input 12-58VDC, 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

- > 4 x 1GbE/2.5GbE SFP fiber interfaces and 8 x 10/100/1000BASE-T RJ45 LAN interfaces, 1 Digital Input/Output/RS485/Modbus interface and 1 USB interface
- > 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 DC12-58V inputs, with reverse & over-voltage protection
- > Operation temperature from -40 to +75°C

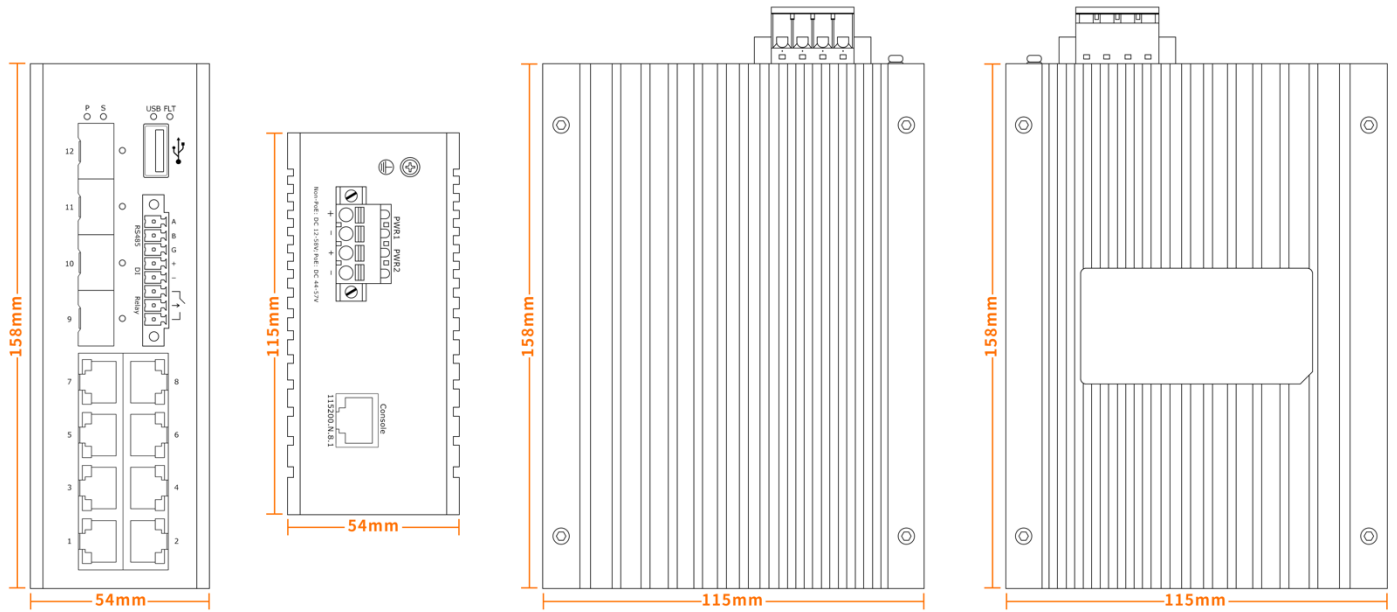
Specifications

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| Interface Specifications | Fiber port | 4 * 1000/2500Base-X SFP |
| | Copper port | 8 * 10/100/1000Base-T (RJ45) |
| | Management Port | 1 * RJ45 Console 1 * USB 2.0 for configuration & upgrade |
| | Data Port | 1 * RS-485 1 * Digital Input 1 * Digital Output |
| Power Specifications | Input voltage | 12-58VDC, redundant inputs |
| | Input current | 1.2A max |
| | Power consumption | ≤ 15W (full load) |
| | Power interface | 4-pin terminal block |
| | Reverse polarity protection | Supported |
| | Over-voltage protection | Supported |
| | Over-current protection | Supported |
| LED Indicators | 1 – PWR (Green) | Power on indicator |
| | 2 – SYS (Green) | System working status indicator |
| | 3 – USB (Green) | USB port working status indicator |
| | 4 – ALM (Red) | Fault alarm indicator |
| | 5 – LNK/ACT (Green) | RJ45 port link up/down/act indicator per port |
| | 6 – SPEED (Yellow) | RJ45 port speed indicator per port |
| | 7 – LNK/ACT (Green) | SFP port link up/down/act indicator per port |
| Specifications | Switching capacity | 36Gbps |
| | Packet forwarding rate | 53.5Mpps |
| | MAC address table | 16K |
| | VLAN | 4K |
| | Buffer | 12Mb |
| | Forwarding delay | < 5us |
| | 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 |
| | Port Mirroring | Multiple to one port mirroring |
| | Ring Protection | STP/RSTP/MSTP ITU-T G.8032 ERPS, sub-20ms switchover time |
| | DHCP | DHCP Client DHCP Snooping |
| | Multicast | IGMPv1, v2 & v3 IGMP Snooping |
| | ACL | ACL policies based on MAC/IP |

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|-----------------------------|--------------------------------|---|
| | Quality of Service (QoS) | Ingress port-based rate-limiting Egress port-based rate-limiting QoS class remarking Support policy-based QoS SP and WRR queue scheduling |
| | Security | IEEE 802.1x port/MAC authentication RADIUS IP Source Guard, port/MAC/IP binding ARP inspection and filtering |
| | Management and Maintenance | HTTP/HTTPS web management SNMPv1/v2c/v3 support 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 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 |
| 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) |
| | 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 |
| Physical parameters | Certifications | CE, FCC, RoHS |
| | Dimensions | 54(W)*115(D)*158(H)mm |
| | Weight | Net weight 1.35KG |

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| | Protection Level | IP40 |
| | Installation Method | DIN-Rail |
| Warranty | Standard Warranty | 5 years |

Physical dimensions



Ordering information

| Model | Description |
|-----------------|--|
| TI-2008G-4DGS-D | Managed Industrial Ethernet Switch, 8x10/100/1000Base-T RJ45 + 4x1GbE/2.5GbE SFP ports, supporting DI/DO/RS485/Modbus, DC12-58V dual redundant power inputs, Din-rail, operation temperature: -40°C to +75°C |