

QUICK START GUIDE

International standard POE Switch

Applicable Model: TD-MIS308P-2G4F

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Touching
the future

Product Specification

14-Port Gigabit Network Management Industrial PoE Switch

TD-MIS308P-2G4F



Product Description

TD-MIS308P-2G4F series full Gigabit Layer 2 network management PoE switch, with 10 Gigabit Ethernet ports + 4 Gigabit uplink SFP optical port slots, of which 1-8 ports support IEEE 802.3af/at standard PoE power supply, Single port PoE power up to 30W. As a PoE power supply device, it can automatically detect and identify standard powered devices and supply power to them through network cables. It can supply power to POE terminal equipment such as industrial wireless AP, network camera, industrial control IP phone, PLC module, industrial sensor, etc. through the network cable, to meet the industrial networking environment that requires high-density PoE power supply, suitable for intelligent transportation, rail transit, electric power Establish a cost-effective, stable and reliable communication network in industrial scenarios such as industry, mining, petroleum, shipping, metallurgy and green energy construction.

TD-MIS308P-2G4F has L2+ network management function, supports IPV4 static route forwarding, supports complete security protection mechanism, perfect ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and ERPS (<20ms) ring network protocol to improve link backup and network reliability. When a one-way network fails, communication can be quickly restored to ensure important Transmission of uninterrupted communication. According to actual application needs, through Web, CLI, SNMP, Telnet and other network management methods, perform PoE power supply management, port flow control, VLAN division, QoS, LACP, IGMP and DHCP and other application service configurations. The switches are all made of aluminum alloy profiles, with super heat dissipation performance, which ensures that they can run stably for a

long time in outdoor high-temperature environments. The service ports all support 6KV electrostatic lightning protection, redundant dual power input interfaces, and Din-rail installation. The best choice for large-scale network and multi-service network access.

Product Features

- 1.Single-port PoE power up to 30W, af/at adaptive, widely compatible with various network terminals;
- 2.Photoelectric hybrid uplink port, flexible adaptation to network cable and optical fiber connection, adaptation to various networking cascades and expansions, making networking easier;
- 3.Full gigabit high-speed transmission, high-bandwidth transmission is stable and guaranteed, supports speed and flow control of each port, realizes long-distance transmission of 10M/250 meters, easily solves long-distance communication and power supply problems, and meets different user needs;
- 4.Industrial-grade high-bandwidth switching chip, high backplane, large cache, reducing network congestion;
- 5.Support IEEE802.3X full-duplex intelligent flow control, large stream high-definition transmission without lag;
- 6.Support MAC address automatic learning and updating, support port automatic flip (Auto MDI/MDI-X) function;
- 7.The service port supports 6KV anti-surge (lightning protection) protection, PoE short-circuit and overload protection, making it safer and more secure to use;
- 8.Aluminum alloy profile metal shell, strong heat dissipation, shielding interference, strong, rust-proof and more durable;
- 9.Dual DC redundant power supply interface, DC48-57V wide voltage input, meeting the wide voltage requirements of industrial environments;
- 10.DIN35 guide rail installation, IP40 protection level, wide temperature design from -40°C to +75°C, more stable and reliable application in harsh environments;
- 11.Low power consumption, fanless and silent design, easy to install and use.

Software features

Strong functions

- 1.Support 128 entries IPV4 static routing, support ARP protocol, maximum 1024 entries.
- 2.Flexible port bandwidth and traffic configuration, optical port DDMI digital diagnosis function, easy to realize fine network management.
- 3.Support IEEE 802.1Q VLAN, support protocol VLAN, support QinQ VLAN, users can flexibly divide VLAN according to needs.
- 4.Support QoS, support port-based, 802.1P-based and DSCP-based three priority modes and four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.
- 5.Support ACL, realize the filtering of data packets by configuring matching rules, processing operations and time permissions, and provide flexible security access control strategies.
- 6.Support IGMP V1/V2 multicast protocol, support IGMP SnoopingV1/V2/V3, to meet multi-terminal high-definition

video surveillance and video conference access requirements.

7.Support STP/RSTP/MSTP production tree protocol and ERPS fast ring network protocol to eliminate layer 2 loops and realize link backup.

8.Support static aggregation and dynamic aggregation (LACP), effectively increase link bandwidth, realize load balancing, link backup, and improve link reliability.

Complete Security Features

1.Support WEB interface user authentication.

2.Support CPU protection to prevent large data flow from attacking the switch itself.

3.Support 802.1x authentication, remote RADIUS, TACACS+ authentication.

4.Hardware supports IP ACL, MAC ACL, ACL port filtering function, MAC address binding, port-based IP+MAC+Vlan+port multi-binding function.

5.Support DHCP Snoopingv1/v2/v3 function, port isolation function, port broadcast storm suppression function.

Convenient operation and maintenance management

1.Support various management and maintenance methods such as Web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3).

2.Support HTTP/HTTPS, SSH and other encryption methods, making management more secure.

3.Support HTTP/TFTP to realize firmware update/upgrade, support configuration file upload/download, and restore system configuration with one key.

4.Support RMON, system log, and port traffic statistics, which is convenient for network optimization and transformation.

5.Support LLDP, which is convenient for the network management system to query and judge the communication status of the link.

6.Support CPU monitoring, memory monitoring, Ping detection, cable detection.

Product Specifications

Model		TD-MIS308GP-2G4F
Port Characteristics		
fixed port	Downlink Port	8 10/100/1000Base-T RJ45 network ports
	Uplink Port	2 10/100/1000Base-T RJ45 network ports + 4 100/1000M SFP optical port slots
	PoE Port	1-8 ports support af/at standard PoE power supply, transmission distance 100-250 meters
Network port characteristics		1-8/1-10 ports 10/100/1000M self-adaptive, full/half duplex MDI/MDI-X self-adaptive

Twisted pair transmission	10BASE-T: Cat3,4,5 UTP(≤250 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T: Cat5e or later UTP(≤100 meter)
Optical port characteristics	Gigabit SFP optical fiber interface, the default is not equipped with optical modules, which need to be purchased separately (optional order can be single-mode/multi-mode, single-fiber/dual-fiber optical modules, LC/SC)
fiber optic cable	Multi-mode : 850nm 0~550M , 50μm/125μm&62.5μm/125μm Single model : 1310nm 0~40KM , 1550nm0~120KM . 9.5μm/12.5μm
Chip parameters	
Network management type	L2+ network management
Network protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T IEEE802.3u 100Base-TX IEEE802.3x Flow Control IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree protocol IEEE 802.1w Rapid Spanning Tree protocol IEEE 802.1s Multiple Spanning Tree protocol IEEE 802.1p Class of service IEEE 802.1Q VLAN tagging IEEE 802.1x Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3af DTE Power via MDI IEEE 802.3at DTE Power via MDI
forwarding mode	Store-and-forward (full wire speed)
CPU	500MHz
DRAM	1Gbits
FLASH	128Mbits
Backplane Bandwidth	28Gbps (non-blocking)
packet forwarding rate@64byte	20.83Mpps
MAC address table	8K
packet forwarding cache	4.1Mbits
jumbo frame	10Kbytes
indicator light	Power indicator: PWR (green); System running indicator: SYS (green); Network indicator: Link/Act (green); PoE indicator: PoE (yellow); Optical port indicator: SFP (green).
One key reset switch	1, long press for 6 seconds and release to restore factory settings
MTBF	500,000 hours
POE and Power Characteristics	
POE port	1-8 ports support IEEE802.3af/at standard POE power supply
PoE management	Support PoE on/off and restart for each port, PoE working status display for each

	port, and real-time PoE power display
power pin	Default 1/2(+), 3/6(-) 4-core power supply
Single port maximum PoE power	30W, standard IEEE802.3af/at
Input voltage	DC48-57V
Overall power consumption	Standby power consumption: <13W; full load power consumption: <120W@af, 240W@at
Supporting power supply	The power supply is not provided by default and needs to be purchased separately. DC48V/120W or DC48V/240W is recommended
Physical Specifications	
Cooling method	Natural heat dissipation without fan
Working temperature/humidity	-40~+75°C; 5%~90% RH non-condensing
storage temperature/humidity	-40~+85°C; 5%~95% RH non-condensing
Appearance size (L*W*H)	175*135*48mm
Net weight/Gross weight	< 1.3kg / < 1.6kg
installation method	Desktop, DIN-rail installation
Product Certification and Warranty	
Lightning Protection/Protection Level	Port lightning protection: 6KV 8/20us; protection level: IP40
Applicable industry standard	IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge IEC61000-4-3 (RS): 10V/m (80~1000MHz) IEC61000-4-4 (EFT): power line: ±4kV; data line: ±2kV IEC61000-4-5 (Surge): power line: CM±4kV/DM±2kV; data line: ±4kV IEC61000-4-6 (radio frequency conduction): 10V (150kHz~80MHz) IEC61000-4-8 (power frequency magnetic field): 100A/m continuous; 1000A/m, 1s to 3s IEC61000-4-9 (pulse magnetic field): 1000A/m IEC61000-4-10 (damped oscillation): 30A/m 1MHz IEC61000-4-12/18 (oscillating wave): CM 2.5kV, DM 1kV IEC61000-4-16 (common mode conduction): 30V continuous; 300V, 1s FCC Part 15/CISPR22 (EN55022): Class A IEC61000-6-2 (general industry standard)
mechanical properties	IEC60068-2-6 (anti-vibration) IEC60068-2-27 (shock resistance) IEC60068-2-32 (free fall)
Safety certification	CE, FCC, RoHS, CCC
Software Management Features	
The port supports IEEE802.3x flow control (full duplex), half-duplex back pressure flow control Supports forced port mode and speed Support broadcast storm and port storm suppression	

	<p>Support port traffic speed limit, the minimum granularity is 16Kbps, the maximum is 1Gbps</p> <p>Support port real-time traffic management (Flow Interval)</p> <p>Support jumbo frame size control, up to 16K data packets</p> <p>Support optical port DDMI digital diagnosis function</p>
IP routing	<p>Support L2+ network management function,</p> <p>Support IPV4 static routing/default routing, with a maximum of 128 entries</p> <p>Support ARP protocol, the maximum number of entries is 1024</p>
VLAN	<p>Support port-based VLAN (4K), IEEE802.1q VLAN</p> <p>Support protocol-based VLAN</p> <p>Support Access, Trunk, Hybrid three types of port configuration</p>
port trunking	<p>Support static aggregation and dynamic aggregation (LACP)</p> <p>Support a maximum of 6/7 aggregation groups, and each aggregation group supports a maximum of 8 ports</p>
Ring function	<p>Support loop protection function</p> <p>Support STP/RSTP/MSTP Spanning Tree Protocol</p> <p>Support ERPS ring network (single ring, multi-ring, intersecting ring and tangent ring configuration), ring network self-healing time is less than 20ms</p>
multicast	<p>Support IGMP Snooping v1/v2/v3, up to 1024 multicast groups</p>
mirror image	<p>Supports bi-directional traffic mirroring for basic ports</p>
QoS	<p>Support priority based on port, 802.1P and DSCP/ToS, each port supports 8 output queues</p> <p>Support Equ, SP, WRR, SP+WRR four priority scheduling modes</p> <p>Support priority mark Mark/Remark</p> <p>Support flow-based rate limiting, packet filtering, redirection</p>
ACL	<p>Support L2~L4 packet filtering function, can match the first 80 bytes of the message, provide based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range , VLAN, etc. define the ACL.</p> <p>Support ACL based on port and VLAN</p>
security features	<p>Support user hierarchical management and password protection</p> <p>Support port-based IEEE802.1X authentication</p> <p>Support AAA&RADIUS and TACACS+ authentication</p> <p>Support the number limit of MAC address learning</p> <p>Support MAC address black hole, address binding</p> <p>Support SSH 2.0, providing a secure encrypted channel for user login</p> <p>Support port isolation</p> <p>Support ARP packet speed limit function</p> <p>Support IP source address protection</p> <p>Support ARP intrusion detection function</p> <p>Support anti-DoS attack</p> <p>Support port broadcast packet suppression</p> <p>Support host data backup/restore mechanism</p> <p>Quaternary binding function of IP+MAC+VLAN+port</p>
DHCP	<p>Support DHCP Server</p> <p>Support DHCP Client</p> <p>Support DHCP Snooping v1/v2/v3</p>

Management and Maintenance	<p>Support Web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3) and other diversified management and maintenance Support WEB network management (support HTTP/HTTPS)</p> <p>Support HTTP, TFTP file upload/download management</p> <p>Support RMON 1, 2, 3 and 9 groups</p> <p>Support one-key restore to factory settings</p> <p>Support NTP clock and local clock</p> <p>Support local log and system log (SYSLOG)</p> <p>Support Ping detection</p> <p>Support cable status check</p> <p>Support CPU real-time utilization status viewing</p> <p>Support Link Layer Discovery Protocol LLDP</p> <p>Support NMS platform cluster unified management (LLDP+SNMP)</p>
System Requirements	<p>Web browser: Mozilla Firefox 2.5 or later, Google Chrome V42 or later</p> <p>Category 5 and above Ethernet cables;</p> <p>TCP/IP network adapter and operating system (such as Microsoft Windows, Linux or Mac OS)</p>

Model	Device Information	recommended power supply
TD-MIS308P-2G4F	L2+ network management type 10 10/100/1000M network ports + 4 Gigabit uplink SFP optical port slots, industrial POE switch, 1-8 ports support IEEE 802.3af/at international standards, support dual DC redundant power input (Phoenix terminal connection), support rail installation.	48V/120W/240W
<p>Note: The power supply and SFP optical module are not equipped by default, if you need to choose, please contact the dealer or business manager</p>		



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