

MODEL : TX8-8GE24GFS4T-SFP-B

Mesh-Link
绍明



Industrial-grade managed switch 24 x Gigabit port + 8 x PoE and 4 x 10G layer 3 core

The TX8-8GE24GFS4T-SFP-B switch is a 10G three-layer core switch launched by the company. The TX8-8GE24GFS4T-SFP-B switch is an enhanced IPv6 10G Ethernet switch with advanced hardware processing capabilities and the richest business features. The whole machine adopts a modular design, supports up to 4 10G SFP+ ports, retains the expansion capability of further supporting 10GE when achieving Gigabit aggregation or access, supports IPv4/IPv6 hardware dual stack and line-speed forwarding, so that customers can calmly cope with the upcoming IPv6 era. It provides high-capacity switching capabilities. The TX8-8GE24GFS4T-SFP-B switch has an operating temperature of -40°C ~ 85°C, has super ruggedness and can adapt to various harsh environments, and can also be easily placed in the computer room cabinet. The rack-mounted installation features and wide temperature operation make the TX8-8GE24GFS4T-SFP-B switch a plug-and-play industrial-grade device, providing a reliable and convenient solution for users' Ethernet device networking.

PRODUCT DETAIL

- Product name: Industrial-grade managed 1000M 24 optical 8 electrical 40G optical layer 3 core switch
- Type: Network management type, managed 1U rack-mount
- Fiber type: SFP optical interface
- Transmission distance: 20KM/40KM/60KM/80KM/100KM (transmission distance is subject to the distance of the purchased SFP module)
- Lightning protection level: Port 6KV lightning protection
- Network port: 10/100/1000BaseT(X) auto-detection, full/half duplex MDI/MDI-X adaptive
- Protection level: IP40
- Input voltage: AC: 110~240V/50~60Hz
- Working temperature: -40 ~ +70°C
- Packaging type: standard factory packaging
- Packing list: One industrial-grade three-layer managed switch. User manual, warranty card, certificate of conformity

Rich port types and flexible port expansion

The TX8-8GE24GFS4T-SFP-B switch supports 4 10 Gigabit SFP+ ports, and users can flexibly choose 1-4 10 Gigabit ports according to the networking situation. The TX8-8GE24GFS4T-SFP-B also provides a variety of Gigabit ports to meet the different networking needs of large-scale network aggregation or small and medium-sized network cores.

Powerful processing capabilities

The TX8-8GE24GFS4T-SFP-B switch is based on the powerful and stable processing capabilities of the VCore-III MIPS-based CPU;

TX8-8GE24GFS4T-SFP-B provides up to 360Gbps switching capacity, and the port filters and forwards 131Mpps at full line speed, ensuring non-blocking forwarding of large-volume data on the backbone network.

Complete security control strategy

Supports port-based user IP+MAC address authentication, port-based 802.1X authentication, remote Radius, and NAS authentication.

Support IP ACL, MAC ACL, Vlan ACL, support ACL functions based on layer 3 and 4, effectively defend against ARP attacks and viruses;

Supports comprehensive storm control functions, which can suppress broadcast, multicast, and unicast storms.

Supports unique ARP intrusion detection function, which can effectively prevent hackers or attackers from implementing the increasingly popular "ARP spoofing attack" through ARP packets;

Supports IP Source Guard feature to prevent illegal address spoofing including MAC spoofing, IP spoofing, MAC/IP spoofing, and DoS attacks caused by large-volume address spoofing.

Provides DHCP Snooping function. By establishing and maintaining the DHCP Snooping binding table, it can snoop the MAC address, IP address, lease period and other information of the access user, solving the problem of IP and port tracking and positioning of DHCP users.

Complete reliability protection mechanism Convenient management and maintenance

The TX8-8GE24GFS4T-SFP-B switch uses the CPU protection strategy to classify and limit the flow rate of the messages sent to the CPU to prevent illegal attack messages from attacking the CPU and consuming resources;

Supports multiple spanning tree protocols such as STP, RSTP, and MSTP, fast convergence, improved fault tolerance, guaranteed stable network operation and link load balancing, reasonable use of network channels, and improved redundant link utilization;

Supports industrial Ethernet ring network protocol ERPS, providing millisecond-level fast service switching performance to ensure uninterrupted services. Moreover, the protocol is simple and reliable, with high switching performance, easy maintenance, and flexible topology, which can greatly facilitate users to manage and plan the network;

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It adopts industrial-grade switching power supply with lightning protection design, overvoltage protection design, and surge protection design. The voltage can adapt to a wide range of 110-240V, ensuring the normal operation of the network in adverse natural weather and unstable voltage environments.

Through a simple visual WEB interface (supporting http and https protocols), various functions of the switch can be operated simply and conveniently;

Support SNMP V1/V2/V3 network management to configure and manage devices;

Support command line configuration (CLI), management through Telnet and Console port;

Supports encryption methods such as SSH2.0, making management more secure;

Support PDP and LLDP protocols to make network management easier;

Support NTP clock protocol, which can automatically synchronize network time;

Support port short circuit to restore factory settings, making maintenance easier;

PRODUCT FEATURES

- Data control: support 802.3X full-duplex flow control, support network storm suppression
- Redundant network: support STP/RSTP/MSTP, support ERPS (self-healing time <20ms)
- Multicast management: support IGMP Snooping V1/V2/V3
- VLAN: support IEEE 802.1Q VLAN, effectively isolate broadcast domains
- Link aggregation: support static/dynamic link aggregation, provide perfect bandwidth utilization
- QOS: support COS\DSCP, 4 queues, support WRR\SP scheduling mode
- Security management: support ACL access control list, support 802.1X, support user hierarchical management
- Management function: support WEB, SNMP management method
- Monitoring and maintenance: support port mirroring, interface status monitoring, log management
- Alarm function: support power supply, port, abnormal status relay output IP50 protection level

APPLICATION ENVIRONMENT

Million high-definition monitoring transmission

Remote network video conferencing system

Remote multimedia teaching/campus monitoring

Urban intelligent traffic monitoring system (ITS)

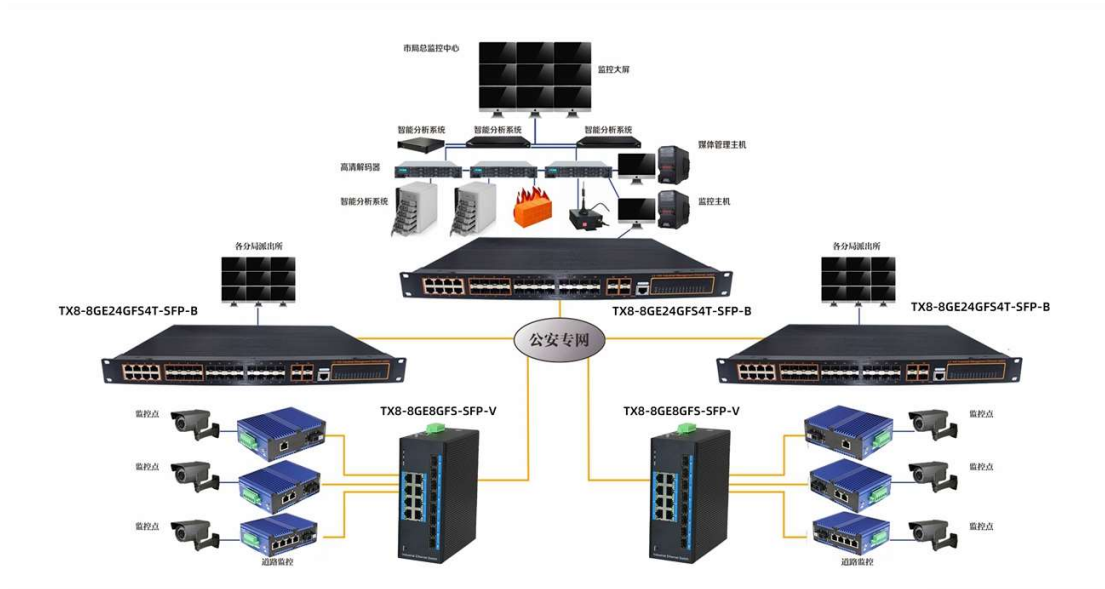
Security monitoring system for large factories and mines

Multi-function network system

Highway monitoring system, electronic road monitoring, snapshot system

Industrial environment is relatively harsh or has high requirements for lightning protection

Connection diagram



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SPECIFICATION

Product model:

TX8-8GE24GFS4T-SFP-B

Product ports:

24 Gigabit optical ports + 8 Gigabit multiplexed electrical ports + 4 10 Gigabit optical ports

Management port:

1 console port

Reset button:

1 reset button

Switching capacity:

360Gbps

Packet forwarding rate:

131Mpps

Digital alarm tube :

support

MAC address:

support 32K MAC address table;
support automatic update, two-way learning;

DHCP:

Support DHCP Client; Support DHCP Server;
Support DHCP Snooping; Support DHCP Relay;

Operating temperature:

-40~85°C

Storage temperature:

-40~85°C

Working humidity:

10%~90% without condensation

Storage humidity:

5% to 95% without condensation

Dimensions:

440 (L) × 285 (W) × 44.5 (H) mm

Machine weight:

<4Kg

Input voltage:

AC: 110~240V/50~60Hz

Power consumption:

<45W

Port aggregation:

supports 14 groups of aggregation, each group supports up to 16 ports,
supports static aggregation and dynamic aggregation

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Port mirroring:

supports many-to-one port mirroring, with no limit on the number of mirror source ports

Loop protection:

support loop detection/loop avoidance

Ring network protocol:

Support industrial-grade ring network protocol ERPS

Port flow control:

support half-duplex based on back pressure control;

Port speed limit:

Support full-duplex based on PAUSE frame;

IP routing:

Support port-based input/output bandwidth management,
support static routing;
support dynamic routing RIP, OSPF;

QOS:

SP (Strict Priority), strict priority round-robin algorithm;
WFQ (Weighted Fair Queuing) weighted fair queuing;
WRR (Weighted Round Robin), weighted priority round-robin algorithm;
Random Early Detect (RED), random early detection algorithm;
Weighted Random Early Detection (WRED), weighted random early detection algorithm;
Head Of Line, anti-congestion mechanism;
Best-Effort Service, best effort service;
First come first served, first come first served algorithm;
802.1p port queue priority algorithm;
Cos/Tos, QOS tag;
Differentiated Service, differentiated service;

Network cable sequence:

Support Auto-MDIX function, automatically identify straight-through network cables and crossover network cables

System maintenance:

support configuration file upload/download; support upgrade package upload;
support WEB restore factory configuration; support system log function;
support Ping;
support WEB interface management (support http and https protocols);
support CLI interface management; support Telnet remote management;
support SSH 2.0; support SNMP network management;
support RMON; support LLDP;
support UPnP; support NTP client;

VLAN:

supports up to 4096 VLANs;
supports port-based VLANs;
supports 802.1Q standard VLANs;
supports MAC VLANs;
supports Protocol VLANs;

Storm suppression:

support suppression of broadcast, multicast, unicast, etc.

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Spanning tree:

Support STP spanning tree protocol;
Support RSTP rapid spanning tree protocol;
Support MSTP multiple spanning tree protocol;
Support protocol standards:
IEEE 802.3ad, link aggregation protocol;
IEEE 802.3, 10BASE-T Ethernet;
IEEE 802.3u, Fast Ethernet standard;
IEEE 802.3ab, Gigabit Ethernet standard;
IEEE 802.3z, Gigabit Ethernet fiber standard;
IEEE 802.3ae, 10G Ethernet standard;
IEEE 802.3x, full-duplex Ethernet data link layer flow control;
IEEE 802.3az, EEE energy-efficient Ethernet standard;

Negotiation mode:

Support port auto-negotiation function (auto-negotiation transmission rate and duplex mode)

Multicast control:

support IGMP Snooping;
support MVR (Multicast VLAN Registration) function;
support MLD Snooping (Multicast Listener Discovery Snooping);

Security features:

Hardware supports IP ACL, MAC ACL, VLAN ACL, and supports ACL functions based on layer 3 and layer 4;
Hardware supports port-based IP+MAC binding;
supports IP Source Guard; supports ARP Detection function;
supports IEEE 802.1x port authentication; supports Radius authentication;
supports TACACS+ authentication; supports user hierarchical management and password protection;

DHCP:

Support DHCP Client; Support DHCP Server;
Support DHCP Snooping; Support DHCP Relay;

Certification:

Certified: CE, FCC, Rohs, ISO9001:2008 Network access license from the Ministry of Industry and Information Technology Inspection report from the Ministry of Public Security Safety: UL508

MTBF:

300,000 hours

Warranty:

5 years