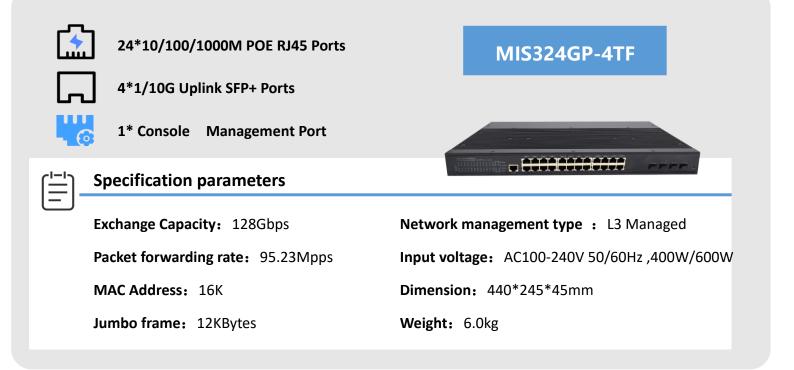
DATA SHEET

24+4TF 10 Gigabit Uplink L3 Managed Industrial POE switch



Product Overview

The MIS324GP-4TF series 10GbE uplink three-layer network management industrial PoE switch has 24 gigabit network ports and 4 10GbE uplink SFP+optical port slots. The 1-24 ports support IEEE 802.3af/at standard PoE power supply, with a single port PoE power of up to 30W. As a PoE power supply device, it can automatically detect and identify power receiving devices that meet the standards and provide power to them through network cables. It can provide power to POE terminal equipment such as industrial wireless APs, network cameras, industrial control IP telephones, PLC modules, and industrial sensors through network cables, meeting the demand for high-density PoE power supply in industrial networking environments. It is suitable for industrial scenarios such as intelligent transportation, rail transit, power industry, mining, petroleum, maritime transportation, metallurgy, and green energy

construction to form an economically efficient, stable, and reliable communication network.

The MIS324GP-4TF has the L3 network management function, supports IPV4/IPV6 static/Dynamic routing forwarding, supports complete security protection mechanisms, perfect ACL/QoS policies and rich VLAN functions, and is easy to manage and maintain. Supporting multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and ERPS (<20ms) ring network protocols, improving link backup and network reliability. In the event of a one-way network failure, communication can be quickly restored, ensuring uninterrupted communication for important transmissions. According to practical application needs, PoE power supply management, port flow control, VLAN partitioning, QoS, LACP, IGMP, and DHCP are configured through network management methods such as Web, CLI, SNMP, and Telnet. The switches are all made of aluminum alloy profiles with strong heat dissipation performance, ensuring their long-term stable operation in outdoor high-temperature environments. The business ports support 6KV electrostatic lightning protection, redundant dual power input interfaces, and rail mounted installation, making them the best choice for you to form a ring network and access a multi business network.

Product characteristics

- Single port PoE power up to 30W, af/at adaptive, widely compatible with various network terminals;
- 4 optical port uplink ports, fiber optic long-distance transmission, suitable for cascading and expanding various ring/chain networks, making networking simpler;
- Full gigabit high-speed transmission, 10 Gigabit bandwidth uplink, stable and guaranteed high bandwidth transmission, supporting speed and flow control per port, achieving 10M/250 meters long-distance transmission, easily solving long-distance communication and power supply problems, and meeting different user needs;
- Industrial grade high bandwidth switching chip, high backplane, large cache, reducing network congestion;
- Support IEEE802.3X full duplex intelligent flow control, with no lag in high-definition transmission of large code streams;
- Support automatic learning and updating of MAC addresses, and support

automatic port flipping (Auto MDI/MDI-X) function;

- The business port supports 6KV surge (lightning) protection, PoE short circuit and overload protection, making it safer and more reliable to use;
- Aluminum alloy profile metal shell, strong heat dissipation, shielding interference, sturdy, rust resistant, and more durable;
- AC+DC dual redundant power interface, meeting the AC/DC power supply requirements of industrial application environments;
- Standard 1U rack mounted, with an IP40 protection level and a wide temperature design from -40 °C to+75 °C, making it more stable and reliable in harsh environments;
- > Low power consumption, fan free silent design, easy to install and use.

Software Features

Strong business capabilities

- It supports 128 entries of IPV4/IPV6 static/Dynamic routing, ARP protocol, 1024 entries at most, and IPV4/IPV6 management.
- Flexible port bandwidth and traffic configuration, optical port DDMI digital diagnosis function, easy to achieve fine network management.
- Support IEEE 802.1Q VLAN, protocol VLAN, and QinQ VLAN, allowing users to flexibly partition VLANs according to their needs.
- Support QoS, support three priority modes based on port, 802.1P, and DSCP, as well as four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.
- Support ACL, filter data packets by configuring matching rules, processing operations, and time permissions, and provide flexible security access control policies.
- Support IGMP V1/V2/V3 multicast protocol, support IGMP SnoopingV1/V2/V3, and meet the needs of multi terminal high-definition video monitoring and video conference access.
- Support STP/RSTP/MSTP production tree protocol and ERPS fast ring network protocol, eliminate layer 2 loops, and achieve link backup.
- Support static aggregation and dynamic aggregation (LACP), effectively increase link bandwidth, achieve load balancing, link backup, and improve link reliability.

Complete security features

- Support for WEB interface user authentication
- Support CPU protection to prevent Big data stream from attacking the switch itself
- Support 802.1x authentication, remote RADIUS, TACACS+ authentication
- The hardware supports IP ACL, MAC ACL, ACL port filtering functions, MAC address binding, and port based IP+MAC+ Vlan+ port multiple binding functions.
- Support DHCP Snoopingv1/v2/v3 function, port isolation function and port Broadcast storm suppression function.
- > Convenient operation and maintenance management
- Support diversified management and maintenance methods such as web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), etc.
- Support encryption methods such as HTTP/HTTPS, SSH, etc. for more secure management.
- Support HTTP/TFTP for firmware update/upgrade, support configuration file upload/download, and one click restore of system configuration.
- Support RMON, system logs, and port traffic statistics for network optimization and transformation.
- Support LLDP, making it convenient for network management systems to query and determine the communication status of links.
- Support CPU monitoring, memory monitoring, Ping detection, and cable detection.

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Technical specifications

Model		MIS324GP-4TF	
Port chara	cteristics		
	Downlink Port	24*10/100/1000Base-T RJ45 POE ports	
Fixed port	Uplink Port	4*1/2.5/10G SFP Ports	
	Management Port	1*Console Ports (115200, 8, N,1)	
	PoE Ports	1-24 ports support af/at standard PoE power supply, transmission distance 100-250 meters	
Network port characteristics		1-24 ports 10/100/1000M adaptive, full/half duplex MDI/MDI-X adaptive	
Twisted pair transmission		10BASE-T: Cat3,4,5 UTP(≤250 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)	
Optical port characteristics		Gigabit SFP optical fiber interface, which is not matched with Optical module by default, needs to be purchased separately (optional order mode/multi-mode, single fiber/dual fiber Optical module, LC/SC)	
Optical cable		Multimode: 850nm 0~550M , 50μm/125μm&62.5μm/125μm Single mode : 1310nm 0~40KM , 1550nm 0~120KM 。 9.5μm/125μm	
Switching	chip parameters		
Network management type		L3 Managed	
		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	
Networking	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 line speed)	

СРИ	800MHz		
DRAM	1Gbits		
FLASH	128Mbits		
Backplane bandwidth	128Gbps (No blocking)		
Packet forwarding rate	· · · · · · · · · · · · · · · · · · ·		
@64byte	95.23Mpps		
MAC Address Table	16K		
Packet forwarding cache	12Mbits		
Jumbo frame	12Kbytes		
Pilot lamp	Power indicator light: PWR (green); System running light: SYS (green); Network indicator light: Link/Act (green); PoE indicator light: PoE (yellow); Light port indicator light: SFP (green).		
One click restore switch	1*press and hold for 6 seconds, and release to Factory reset		
MTBF	500000 hours		
POE and power supply charac	cteristics		
POE Port	1-24 ports support IEEE802.3af/at standard POE power supply		
PoE Management	Support for PoE on/off and restart per port, display of PoE working		
PoE Management	status per port, and real-time PoE power display		
Power supply pin	Default 1/2 (+), 3/6 (-) 4-core power supply		
Single port maximum PoE power	30W, Standard IEEE802.3af/at		
Total power/input voltage	AC: AC100-240V 50-60Hz (built-in)/DC: DC48-57V (external)		
Power interface	AC+DC dual input power interface design, supporting anti reverse connection protection; 1 set of DC48-57V DC input interfaces; 1 set of AC100-240V AC input interfaces		
Overall Power Consumption	Standby power consumption: $< 22W$;		
Supporting power supply	Full load power consumption: < 380W@af , 600W@at Default built-in AC switching power supply: 100~240V 50-60Hz 5.0A; Not equipped with DC DC power supply. If configuration is required, it needs to be purchased separately.		
Physical specification parame	Physical specification parameters		
Heat dissipation method	No fan for natural heat dissipation		
Working temperature/humidity	-40 \sim +75°C; 5% \sim 90% RH No condensation		
Storage temperature/humidity	-40 \sim +85°C; 5% \sim 95% RH No condensation		
Dimensions (L*W*H)	440*245*45mm		
Net weight/Gross weight	<6.0kg / <6.5kg		
Installation method	tallation method Desktop, 1U rack installation		
Product Certification and Warranty			

Lightning protection/protection level	Port lightning protection: 6KV 8/20us; Protection level: IP40	
Applicable industrial standards	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 (RF 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 (shock 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 Industrial Standard)	
Mechanical properties	IEC60068-2-6 (Anti vibration) IEC60068-2-27 (Impact resistance) IEC60068-2-32 (free fall)	
Certification	CE, FCC, RoHS, CCC	
Warranty period	5 Years	
Software Management Features		
Port	Supports IEEE802.3x flow control (full duplex), half duplex backpressure flow control Supports forced port mode and rate Support Broadcast storm and port storm suppression Supports port traffic speed limit, with a minimum granularity of 16Kbps and a maximum granularity of 1Gbps Support port real-time traffic management (Flow Interval) Support Jumbo frame size control, up to 16K packets Supports optical DDMI digital diagnostic function Support L3 network management function, IPv4/IPv6 static/Dynamic	
IP Routing	routing, and IPv4/IPv6 dual stack management Support RIPv1/v2, RIPng Supports OSPFv1/v2, OSPFv3 Supports ARP protocol with a maximum of 1024 entries	
VLAN	Supports port based VLANs (4K), IEEE802.1q Support for protocol based VLANs Support VLAN based on MAC address Support for Voice VLAN Supports three types of port configurations: Access, Trunk, and Hybrid Support for QinQ configuration	

	Support for GVRP VLAN protocol
	Supports static aggregation and dynamic aggregation (LACP)
Port aggregation	Supports up to 14 aggregation groups, with each aggregation group
	supporting up to 8 ports
	Support loop protection function
	Support STP/RSTP/MSTP Spanning Tree Protocol
Ring network function	Supports ERPS ring network (single ring, multi ring, intersecting ring,
5	and tangent ring configurations), with a self-healing time of less than
	20ms for the ring network
	Supports IGMP Snooping v1/v2/v3, up to 1024 multicast groups
Multicast	Support multicast VLAN
	Support MVR (Multicast LAN Registration)
	Supports bidirectional traffic mirroring for basic ports
	Supports bidirectional traffic mirroring for basic ports
Image	Supports 1-to-many mirroring
	Supports up to 4 port sessions
	Supports end-to-end, 802.1P, and DSCP/ToS priority, with each port
	supporting 8 output queues
QoS	Support four priority scheduling modes: Equ, SP, WRR, SP+WRR
200	Support for priority marking Mark/Remark
	Supports stream based speed limiting, packet filtering, and redirection
	Support L2 to L4 packet filtering function, can match the first 80 bytes
	of the message, and provide ACL definitions based on source MAC
	address, destination MAC address, source IP address, destination IP
ACL	address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN,
	etc.
	Supports issuing ACL based on port and VLAN
	Support user hierarchical management and password protection
	Supports port based IEEE802.1X authentication
	Supports AAA&RADIUS and TACACS+ authentication
	Support MAC address learning limit
	Supports MAC address black holes and address binding
	Supports SSH 2.0 and provides a secure encrypted channel for user
	login
Safety characteristics	Supports port isolation
	Support ARP message speed limit function
	Support IP source address protection
	Support ARP intrusion detection function
	Support anti DoS attacks
	Support port broadcast message suppression
	Support host data backup/restore mechanism
	Quad binding function of IP+MAC+ VLAN+ ports
DHCP	Supports DHCP Serve

	Supports DHCP Client
	Supports DHCP Snooping v1/v2/v3
Management and Maintenance	Support diversified management and maintenance such as web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), etc. Support web network management (support HTTP/HTTPS) Supports HTTP and TFTP file upload/download management Supports RMON 1, 2, 3, and 9 groups Support one button Factory reset Supports NTP clock and local clock Support for local and system logs (SYSLOG) Support for local and system logs (SYSLOG) Supports Ping detection Support cable status check Supports real-time CPU utilization status viewing Support Link Layer Discovery Protocol LLDP Support NMS platform based cluster unified management (LLDP+SNMP)
System requirements	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher Category 5 and above Ethernet cables; TCP/IP network adapters and operating systems (such as Microsoft Windows, Linux, or Mac OS)

Packing list

Packing l	Packing list		
	ITEM NAME	Quantity	Unit
	24+4TF 10 Gigabit uplink three-layer network	1	SET
Packing list	management industrial POE switch		
i acking list	AC Power line	1	PC
	Installing the ear hook	1	SET
	Quick to use guide	1	SET
	Warranty Card and Certificate of Conformity	1	SET

Cordering information

Device Name	Device Information	Standard power supply
	L3 network management model with 24 10/100/1000M network ports	
MIS324GP-4TF	and 4 1/10G 10 Gigabit SFP+optical port uplink, industrial POE switch,	400W
	1-24 ports supporting IEEE 802.3af/at international standard, supporting	

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AC+DC redundant power input (AC socket+Phoenix terminal connection), and supporting rack installation.		
Note: The Optical module is not matched by default. If you need to select it, please contact the dealer of		ntact the dealer or
business manage	er	

Contact Us

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