

DATA SHEET

24+4TF 10 Gigabit uplink three-layer network management POE



24*10/100/1000M POE RJ45 Ports



4*1/10G Uplink SFP ports



1*Console Management Port

MS324GP-4TF



Specification parameters

Exchange Capacity: 128Gbps

Packet forwarding rate: 95.23Mpps

MAC Address: 16K

Jumbo frame: 12KBytes

Network management type: L3 Managed

Input voltage:: AC100-240V 50/60Hz , 250W/400W

Dimension: 440*290*45mm

Weight: 4.3kg

【 Product Overview 】

The MS324GP-4TF series 10GbE uplink three-layer network management 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. The MS324GP-4TF business ports all support 4KV electrostatic lightning protection. As a PoE power supply device, it can automatically detect and identify the power receiving devices that meet the standards and provide power to them through network cables. Power can be provided to POE terminal devices such as wireless APs, network cameras, network telephones, and building visual access control intercoms through network cables, meeting the demand for high-density PoE

power supply in network environments. It is suitable for hotels, campuses, parks, supermarkets, banks, scenic spots, factory dormitories, and SMB small and medium-sized enterprises to form an economical and efficient network.

The MS324GP-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.

【 Product characteristics 】

- Single port PoE power up to 30W, af/at adaptive, widely compatible with various network terminals, supporting PoE network management, remote POE port restart, real-time power status viewing;
- 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;
- Enterprise level high bandwidth switching chip, high backplane, large cache, reducing network congestion;
- Support automatic learning and updating of MAC addresses, and support automatic port flipping (Auto MDI/MDI-X) function;

- The business port supports 4KV surge (lightning) protection, PoE short circuit and overload protection, making it safer and more reliable to use;
- Precision steel forged metal shell, shielded from interference, strong heat dissipation, sturdy, rust resistant, and more durable;

【 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.

【 Technical specifications 】

Model		MS324GP-4TF
Port characteristics		
Fixed port	Downlink Port	24*10/100/1000Base-T RJ45 POE ports
	Uplink Port	4*1/10G uplink SFP+ fiber slot ports
	Management Port	1*Console RS232 port (115200, 8, N,1)
	PoE Port	1-24 Ports af/at standard PoE power supply, with a transmission distance of 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 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T: Cat5e or later UTP(≤100 meter)
Optical port characteristics		千兆SFP 光纤接口, 默认不配套光模块, 需要另购, (可选订单模/多模、单纤/双纤光模块, LC/SC)
Optical cable		多模: 850nm/0~550M, 50μm/125μm&62.5μm/125μm 单模: 1310nm/0~40KM, 1550nm/0~120KM 。 9.5μm/125μm
Switching chip parameters		
Network management type		L3 Managed Switch
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
CPU		800MHz
DRAM		1Gbits
FLASH		128Mbits

Forwarding mode	Store and forward (full line speed)
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: L/A (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	100000 hours

POE and power supply characteristics

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 status per port, real-time PoE power display per port, and timed scheduling function for each port
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	400W (AC100-240V)
Overall Power Consumption	Standby power consumption: < 22W; Full load power consumption: < 400W
Supporting power supply	Built-in AC switch power supply AC: 100~240V 50-60Hz 5.0A

Physical specification parameters

Working temperature/humidity	-20°C~+55°C; 5%~90% RH No condensation
Storage Temperature/humidity	-40°C~+75°C; 5%~95% RH No condensation
Dimensions (L*W*H)	440*290*45mm
Net weight/Gross weight	<4.4kg / <5.0kg
Installation method	Desktop and rack mounted

Certification And Warranty

Lightning protection/protection level	Port lightning protection: 4KV 8/20us; Protection level: IP30
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Certification	CE, FCC, RoHS, CCC
Guarantee period	3 years
Software Management Features	
Port	<ul style="list-style-type: none"> 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
IP Routing	<ul style="list-style-type: none"> Support L3 network management function, IPv4/IPv6 static/Dynamic routing, and IPv4/IPv6 dual stack management Support RIPv1/v2, RIPv6 Supports OSPFv1/v2, OSPFv3 Supports ARP protocol with a maximum of 1024 entries
VLAN	<ul style="list-style-type: none"> 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
Port aggregation	<ul style="list-style-type: none"> Supports static aggregation and dynamic aggregation (LACP) Supports up to 14 aggregation groups, with each aggregation group supporting up to 8 ports
Ring network function	<ul style="list-style-type: none"> Support loop protection function Support STP/RSTP/MSTP Spanning Tree Protocol Supports ERPS ring network (single ring, multi ring, intersecting ring, and tangent ring configurations), with a self-healing time of less than 20ms for the ring network
Multicast	<ul style="list-style-type: none"> Supports IGMP Snooping v1/v2/v3, up to 1024 multicast groups Support multicast VLAN Support MVR (Multicast LAN Registration)
Image	<ul style="list-style-type: none"> Supports bidirectional traffic mirroring for basic ports Supports bidirectional traffic mirroring for basic ports Supports 1-to-many mirroring Supports up to 4 port sessions
QoS	<ul style="list-style-type: none"> Supports end-to-end, 802.1P, and DSCP/ToS priority, with each port supporting 8 output queues Support four priority scheduling modes: Equ, SP, WRR, SP+WRR

	<p>Support for priority marking Mark/Remark</p> <p>Supports stream based speed limiting, packet filtering, and redirection</p>
ACL	<p>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 address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN, etc.</p> <p>Supports issuing ACL based on port and VLAN</p>
Safety characteristics	<p>Support user hierarchical management and password protection</p> <p>Supports port based IEEE802.1X authentication</p> <p>Supports AAA&RADIUS and TACACS +authentication</p> <p>Support MAC address learning limit</p> <p>Supports MAC address black holes and address binding</p> <p>Supports SSH 2.0 and provides a secure encrypted channel for user login</p> <p>Supports port isolation</p> <p>Support ARP message speed limit function</p> <p>Support IP source address protection</p> <p>Support ARP intrusion detection function</p> <p>Support anti DoS attacks</p> <p>Support port broadcast message suppression</p> <p>Support host data backup/restore mechanism</p> <p>Quad binding function of IP+MAC+ VLAN +ports</p>
DHCP	<p>Supports DHCP Serve</p> <p>Supports DHCP Client</p> <p>Supports DHCP Snooping v1/v2/v3</p>
Management and Maintenance	<p>Support diversified management and maintenance such as web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), etc.</p> <p>Support web network management (support HTTP/HTTPS)</p> <p>Supports HTTP and TFTP file upload/download management</p> <p>Supports RMON 1, 2, 3, and 9 groups</p> <p>Support one button Factory reset</p> <p>Supports NTP clock and local clock</p> <p>Support for local and system logs (SYSLOG)</p> <p>Supports Ping detection</p> <p>Support cable status check</p> <p>Supports real-time CPU utilization status viewing</p> <p>Support Link Layer Discovery Protocol LLDP</p> <p>Support NMS platform based cluster unified management (LLDP+SNMP)</p>
System requirements	<p>Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher</p> <p>Category 5 and above Ethernet cables;</p> <p>TCP/IP network adapters and operating systems (such as Microsoft Windows, Linux, or Mac OS)</p>

【 Packing list 】

Packing list	ITEM NAME	Quantity	Unit
	24+4TF 10 Gigabit uplink three-layer network management POE switch	1	SET
	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

【 Ordering information 】

Device Name	Device Information	Standard power supply
MS324GP-4TF	L3 network management model with 24 10/100/1000M network ports, 4 1/10G 10 Gigabit SFPs, and optical ports connected to PoE switches. 1-24 ports support IEEE 802.3af/at international standards. Supports desktop and 1U rack installation, with built-in power supply.	400W

【 Contact Us 】

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