DATA SHEET

8+2F Gigabit Managed Industrial POE Switch

8*10/100/1000M POE RJ45 Ports

2*1.25G Uplink SFP Ports

1*Console Management Port

MIS308GP-2GF

Specification parameters

Exchange Capacity：20Gbps

Packet forwarding rate ： 14.88Mpps

MAC Address：8K

Jumbo frame：10KBytes

Network management type ：L2+Managed

Input voltage：DC48-57V

Dimension：150*110*48mm

Weight：1.0kg

【Product Overview 】

The MIS308GP-2GF series full gigabit layer 2 network managed PoE switch has 8 gigabit network ports and 2 gigabit uplink SFP optical port slots, with 1-8 ports supporting IEEE 802.3af/at standard PoE power supply, and 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 MIS308GP-2GF has L2+network management function, supports IPV4 Static routing forwarding, supports complete security protection mechanism, perfect ACL/QoS policy 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;

➢ Dual optical port uplink port, long-distance transmission, suitable for cascading and expanding various ring/chain networks, making networking simpler;

➢ Full gigabit high-speed transmission, stable and guaranteed high bandwidth transmission, supporting speed and flow control per port, achieving 10M/250 meter 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;

➢ Dual DC redundant power interface, DC48-57V wide voltage input, meeting the

wide voltage requirements of industrial environment;

➢ DIN35 rail type installation, IP40 protection level, wide temperature design from -40 ℃ to+75 ℃, more stable and reliable for applications in harsh environments;

➢ Low power consumption, fan free silent design, easy to install and use.

【Software Features】

Strong business capabilities

➢ It supports 128 IPV4 Static routing and ARP protocol, with a maximum of 1024 entries.

➢ 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 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 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		MIS304GP-2GF	MIS308GP-2GF
Port characteristics			
Fixed port t	Downlink Port	4*10/100/1000Base-T RJ45 POE Ports	8*10/100/1000Base-T RJ45 POE Ports
	Uplink Port	2*100/1000M SFP Ports	
	PoE Port	1-4 ports support af/at standard PoE power supply, transmission distance 100-250 meters	1-8 ports support af/at standard PoE power supply, transmission distance 100-250 meters
Network port characteristics		1-4/1-8 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		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	L2+Managed	
Networking 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 line speed)	
CPU	500MHz	
DRAM	1Gbits	
FLASH	128Mbits	
Backplane bandwidth	12Gbps（No blocking）	20Gbps（No blocking）
Packet forwarding rate @64byte	8.928Mpps	14.88Mpps
MAC Address Table	8K	
Packet forwarding cache	4.1Mbits	
Jumbo frame	10Kbytes	
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 characteristics

POE Port	1-4 ports support IEEE802.3af/at standard POE power supply	1-8 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, and real-time PoE power display	
Power supply pin	Default 1/2 (+), 3/6 (-) 4-core power supply	
Single port maximum PoE	30W，Standard IEEE802.3af/at	

power	
Total power/input voltage	DC48-57V
Overall Power Consumption	Standby power consumption: ＜5W; Full load power consumption: ＜ 60W@af , 120W@at	Standby power consumption: ＜10W; Full load power consumption: ＜ 120W@af , 240W@at
Supporting power supply	The default power supply is not compatible and needs to be purchased separately. It is recommended to purchase DC48V/60W or DC48V/120W	The default power supply is not compatible and needs to be purchased separately. It is recommended to purchase DC48V/120W or DC48V/240W

Physical specification parameters

Heat dissipation method	No fan for natural heat dissipation
Working temperature/humidity	-40～+75°C；5%～90% RH No condensation
Storage temperature/humidity	-40～+85°C；5%～95% RH No condensation
Dimension （L*W*H）	150*110*48mm
Net weight/Gross weight	＜0.95kg / ＜1.3kg	＜1.0kg / ＜1.3kg
Installation method	Desktop and rail mounted

Certification & 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
IP Routing	Support L2+network management function, Support IPV4 Static routing/Default route, with a maximum of 128 entries Supports ARP protocol with a maximum of 1024 entries
VLAN	Supports port based VLANs (4K), IEEE802.1q VLANs Support for protocol based VLANs Supports three types of port configurations: Access, Trunk, and Hybrid
Port aggregation	Supports static aggregation and dynamic aggregation (LACP) Supports up to 5 aggregation groups, with each aggregation group supporting up to 8 ports
Ring network function	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	Supports IGMP Snooping v1/v2/v3, up to 1024 multicast groups
Image	Supports bidirectional traffic mirroring for basic ports
QoS	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 Support for priority marking Mark/Remark Supports stream based speed limiting, packet filtering, and redirection
ACL	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. Supports issuing ACL based on port and VLAN

Safety characteristics Management and	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 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
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) 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 list	ITEM NAME	Quantity	Unit
	8+2F Gigabit Managed Industrial POE Switch	1	PC
	Quick to use guide	1	SET
	Warranty Card and Certificate of Conformity	1	SET

【 Ordering information】

Device Name	Device Information	Suggested supporting power supply
MIS304GP-2GF	L2+network management type with 4 10/100/1000M network ports and 2 gigabit uplink SFP optical port slots, industrial POE switch, 1-4 ports supporting IEEE 802.3af/at international standard, supporting dual DC redundant power input (Phoenix terminal connection), and supporting rail type installation.	48V/60W/120W
MIS308GP-2GF	L2+network management type with 8 10/100/1000M network ports and 2 gigabit uplink SFP optical port slots, industrial POE switch, 1-8 ports supporting IEEE 802.3af/at international standard, supporting dual DC redundant power input (Phoenix terminal connection), and supporting rail type installation.	48V/120W/240W
Note: By default, there is no matching power supply and SFP Optical module. If you need to select one, please contact the dealer or business manager		

【Contact Us】

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