DATA SHEET

4+2F Gigabit Managed Industrial POE Switch

4*10/100/1000M POE RJ45 ports

2*1.25G Uplink SFP Ports

1* Console Management Port

MIS304GP-2GF

Specification parameters

Exchange Capacity：12Gbps

Packet forwarding rate：8.928Mpps

MAC Address：8K

Jumbo frame：10KBytes

Network management type ：L2+Managed

Input voltage：DC48-57V

Dimension：150*110*48mm

Weight：0.95kg

【 Product Overview 】

The MIS304GP-2GF series full gigabit layer 2 network managed PoE switch has 4 gigabit network ports and 2 gigabit uplink SFP optical port slots, with 1-4 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.

【 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 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;

➢ 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	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		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	4Mbits
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 power	30W， Standard IEEE802.3af/at
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 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
IP Route	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	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
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)
	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】

	ITEM NAME	Quantity	Unit
Packing list	4+2F Gigabit Managed Industrial 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
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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