

Managed Industrial Grade Ethernet Switch, with 4*1G Combo

Port+24*10/100/1000M PoE/PoE+ Port

JHA-MIGSC4024HP



Introduction

JHA-MIGSC4024HP industrial Ethernet switch is a managed Layer2 industrial Ethernet switch developed by our company. It features 24 adaptive 10/100/1000 Base-T PoE ports and 4 COMBO optical/electrical multiplexing ports. It supports WEB management, VLAN, QoS, SNMP, IGMP snooping and other network functions and Ethernet fast ring network protection before STP/RSTP/MSTP spanning tree ring network; Industrial-grade three-level ESD protection is suitable for a variety of occasions. It also supports the NARI-ICT network security protocol management specification and power failure alarm functionality. Tailored for industrial environments, this product undergoes rigorous component screening, ensuring outstanding performance in stability and environmental adaptability. The housing is made of high-strength metal, making the product lightweight, sturdy, corrosion-resistant, and highly resistant to electromagnetic interference, thereby ensuring the stability and security of the industrial Ethernet switch. It is widely applicable in various industrial automation environments such as power, transportation, and coal mining.

Feature

- STP/RSTP/MSTP/ERPS rapid spanning tree protocols to eliminate Layer 2 loops and achieve

link backup.

- IEEE 802.1Q VLAN, allowing users to flexibly divide VLANs as needed, including Voice VLAN and QinQ configuration.
- IGMP V1/V2 multicast protocols and IGMP Snooping, meeting the requirements for multi-terminal high-definition video surveillance and video conferencing access.
- Port isolation
- Port broadcast storm suppression.
- Diverse management and maintenance methods, including Web management, CLI (Console, Telnet), and SNMP (V1/V2/V3).
- Encryption methods such as HTTPS, SSLV3, and SSHV1/V2 for enhanced management security.
- RMON, system logging, and port traffic statistics for easier network optimization and upgrades.
- LLDP, facilitating network management systems to query and diagnose link communication status.
- CPU monitoring, memory monitoring, Ping detection, and cable length detection.
- Users can easily monitor device status through power indicators (PWR), system operation indicators (SYS), and port status indicators (Link, L/A).
- Provides relay alarm output ports and power failure alarm functionality.
- Integration with network security monitoring devices via SNMP, using both passive polling and active reporting methods to transmit switch online/offline information, MAC binding information, user login information, user modification information, configuration change information, and port up/down information to security monitoring devices, complying with power security access requirements.

Technical Specification

Interface	
	4 x 100/1000 Base-X SFP or 4 x 10/100/1000 Base-T RJ45

Device Interfaces	auto-negotiation ports 24 x 10/100/1000 Base-T PoE ports
Management Interface	1 x Console RJ45 control port
Power Interface	5P Phoenix terminal, optional dual power redundancy
Power Failure Alarm	3P Phoenix terminal
LED Indicators	Power Indicator: PWR (Green) System Indicator: SYS (Green) Ethernet Port Indicator: Green Fiber Port Indicator: Green
Cable Types and Distances	
Single-Mode Fiber	Supported distances: 20/40/60/80/100 km
Multi-Mode Fiber	Supported distances: 550 m / 2 km
Fiber Interface	LC interface
Network Topology & Scale	
Ring Topology	Supports
Star Topology	Supports
Bus Topology	Supports
Tree Topology	Supports
Hybrid Topology	Supports
Electrical Characteristics	
Input Voltage	DC12-55V / AC 100-240V 50-60Hz
Power Consumption	Non-PoE full load: <60W PoE full load: <450W
Layer 2 Switching	
Switching Capacity	56G
Packet Forwarding Rate	41.7Mpps
MAC Address Table	8K
VLAN Support and Quantity	Supports 4K VLANs
Packet Buffer	4.1M
Forwarding Latency	<10us
Port Features	Supports auto MDI/MDIX
Flow Control	Supported
Jumbo Frame	Supports up to 12Kbytes
Spanning Tree Protocol	Supports STP/RSTP/MSTP
Server Configuration	Radius/DHCP/ TACACS+
Ring Network Protocol	Supports ERPS
Link Aggregation	Supports 8 groups
Multicast	Supports IGMP/MVR
Port Mirroring	Supported
Storm Suppression	Supports unicast/multicast/broadcast
Port Traffic Statistics	Supported
	Supports access, trunk, and general modes

VLAN	Supports GVRP/GMRP, MAC-based VLAN, IP subnet-based VLAN, and Voice VLAN configuration
QINQ	Supported
LLDP	Supported
DHCPSEVER	Supported
DHCP L2 Relay Agent	Supported
IP Relay Agent	Supported
DHCPv6SEVER	Supported
DHCPv6relay	Supported
DNS	Supported
Port Rate Limiting	Supported
User Configuration	Supports view and write access at two levels
MAC Address Learning	Supported
Supported	Supports IP/VLAN/port binding
IPv4/IPv6 Configuration	Supported
Management VLAN Configuration	Supported
UDLD	Supported
Ring Network Protection	Supported
Protection	
IP Rating	IP40
Power Surge Protection	IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us)
Radiated Immunity	IEC 61000-4-3 Level 3 (10V/m)
Electrical Fast Transient Immunity	IEC 61000-4-4 Level 3 (1V/2V)
Conducted Immunity	IEC 61000-4-6 Level 3 (10V/m)
Power Frequency Magnetic Field Immunity	IEC 61000-4-8 Level4 (30A/m)
Voltage Dips	IEC 61000-4-11 Level3 (10V)
EMI	CLASS A
Electrostatic Discharge Immunity	IEC 61000-4-2 Level 4 (15KV/30KV)
Free Fall	0.5m
Environmental Conditions	
Access Control List (ACL)	Supports 500 ACL entries Supports IP standard ACL Supports MAC extended ACL Supports IP extended ACL
Authentication Management	Supports 802.1x, Enable level, HTTP, HTTPS, and Dot1x
DoS Management	Supports DoS attack configuration
Port Security	Supported
Port Isolation	Supported
Private VLAN	Supported
Dhcp-snooping	Supported
IPSG	Supported
Dynamic ARP Inspection	Supported

Quality of Service (QoS)	Supports 802.1P priority Supports IP DSCP priority Supports port queue priority Supports QoS queue drop priority
Management Functions	
Command Line Interface (CLI)	Supported
Management Serial Port	Supported
Telnet	Supported
SSH	Supported
Web Management	Supported
SNMP	Support SNMPv1/v2c/V3
Sflow	Supported
User Management	Supported
System Logging	Supported
File Upgrade	Supported
File Transfer	Supported tftp、ftp、scp、sftp
Firmware Upgrade	Supports dual firmware management
Device Reboot	Supported
Device Diagnostics	Supports Ping IPv4/IPv6 and Traceroute IPv4/IPv6
SFP Module DDM	Supported
Environmental Conditions	
Operating Temperature	-40°C~+85°C
Storage/Transport Temperature	-40°C~+85°C
Relative Humidity	5% to 95% (non-condensing)
Cooling Method	Fanless design, natural cooling
MTBF	100,000 hours
Mechanical Structure	
Dimensions	440X250X44.5mm
Installation Method	Standard 1U Rack Mount Installation
Weight	3KG
Housing Material	Industrial metal casing
Accessories	
Included Equipment	Device, terminal, certificate, and user manual

Order Information

Model No.	Description of Goods
JHA-MIGSC4024HP	Managed Industrial Ethernet Switch,4 1G combo port and 24 10/100/1000Base-T(X) PoE Port, AC220V, -40-85 ° C Operating Temperature