

## JHA-MIWS4G024HP Series

28-port Managed Industrial Ethernet Switch, with 4 1G/10G SFP+ Slot and 24 10/100/1000Base-T(X) IEEE802.3af/at PoE/PoE+ Port



### ◆ Overview

JHA-MIWS4G024HP series switches support Layer 3 routing protocols that include Static Routing, RIP, OSPF and VRRP, helping to build scalable, reliable networks. Multicast routing protocols such as PIM-SM and PIM-DM guarantee efficient routing for multicast groups.

JHA-MIWS4G024HP Series switches support up to 8 switches for network simplification. With different port forms including Gigabit Ethernet, SFP Slots, 10G SFP+ Slots, JHA-MIWS4G024HP Series switches are capable of high switching capacity for the network. With all units identified by a simple IP address, the stack can be easily configured and monitored.

JHA-MIWS4G024HP series switches provide 3 kinds of out-of-band management ports: RJ45 console ports, Micro-USB console ports and RJ45 out-of-band management ports. Micro-USB console ports are designed for those laptop computers which do not support the RS232 (DB9) interface. Customers can use a USB cable to manage switches through the CLI (command-line

interface). The RJ45 out-of-band management port is used solely for web management, leaving the RJ45 ports free for data transmission.

## ◆ Product Features

- ✧ Support WEB/HTTP/HTTPS/SSH/Telnet/SNMP/CLI/CONSOLE/ROM diversified management and maintenance methods.
- ✧ Support IPV4/IPV6 network management interface and network neighbor management.
- ✧ Support DHCP server, DHCPL2/L3 relay agent, DHCPV6 service.
- ✧ Support DNS host and client configuration management.
- ✧ Support SNMP V1/V2C/V3 and Trap message configuration management.
- ✧ Support LLDP and LLDP-MED configuration management, ISDP configuration management
- ✧ Support switch timing plan management.
- ✧ Support port mode, port bandwidth speed limit, rate control, flow control and other management, port status panel information display.
- ✧ Support 8 groups of static and dynamic lacp aggregation.
- ✧ Support unicast/multicast/broadcast storm suppression
- ✧ Support STP/RSTP/MSTP production tree protocol and loop protection protocol, support CST and MST configuration, eliminate the second layer loop, and realize link backup
- ✧ Support port VLAN, IEEE 802.1Q VLAN, Voice VLAN, VLAN double tag QinQ configuration.
- ✧ Support MAC address aging and static MAC address configuration
- ✧ Supports IGMP and MVR multicast protocols, supports IGMP Snooping/ MLD Snooping, and meets the needs of multi-terminal high-definition video monitoring and video conference access.
- ✧ Support Auto-VoIP and UDLD port configuration
- ✧ Support IP routing and L3 port routing management
- ✧ Support ARP/RIP/OSPF/OSPFV3/BGP/Router Discovery/VRRP/ Route-Map/BFD three-layer routing
- ✧ Support QOS 802.1P and IP DSCP priority, port queue management

- ❖ Support Diffserv differentiated service quality management, including Class View/Policy View/IPv6 Class View
- ❖ Support Radius/TACACS+ server and 802.1x/Enable level/HTTP/HTTPs/Dot1x authentication
- ❖ Support configuration management to prevent DOS attacks
- ❖ Support port access security management configuration and status query
- ❖ Support port IP security management based on IGMP Snooping/IPSG/dynamic ARP inspection
- ❖ Support ACL management of IPV4/IPV6/MAC binding
- ❖ Support system log/port statistics/port connection/port cable test/SFP optical module information/EAP packet monitoring management
- ❖ Support switch restart/reset/fixed upgrade/configuration import/export/IMG dual firmware management/IP diagnosis/Chinese and English software interchange
- ❖ Support switch hardware module/CPU temperature system occupancy view, support software function setting and SNTP time setting
- ❖ Users can easily understand the working status of the equipment through the power indicator (PWR), system operation indicator (SYS), port status indicator (Link, L/A).

## ◆ Product Parameters

| <b>Hardware Features &amp; Performance</b> |                        |   |
|--|------------------------|---|
| Model                                      | JHA-MIWS4G024HP        |   |
| General                                    | Standard and Protocols | <p>IEEE 802.3af/at<br/>IEEE 802.3i 10BASE-T Ethernet<br/>IEEE 802.3u 100BASE-TX/FX<br/>IEEE 802.3ab 1000BASE-T<br/>IEEE 802.3z 1000BASE-X<br/>IEEE 802.3ae 10GBASE-SR/LR<br/>IEEE 802.3av GVRP<br/>IEEE 802.3x Flow control<br/>IEEE 802.3ad Link Aggregation<br/>IEEE 802.1v Protocol VLAN<br/>IEEE 802.1d Spanning Tree Protocol (STP)<br/>IEEE 802.1s Rapid Spanning Tree (RSTP)<br/>IEEE 802.1w Multiple Spanning Tree (MSTP)<br/>IEEE 802.1q VLANs / VLAN tagging<br/>IEEE 802.1x Network Login Security<br/>IEEE 802.1p QoS</p> |

|   |                        |  |
|---|------------------------|--|
|   | Network Media          | 10BASE-T: UTP category 3, 4, 5 cable (maximum 100m)<br>100BASE-TX/1000Base-T: UTP category 5, 5e or above cable (maximum 100m)<br>1000BASE-X: MMF, SMF<br>10GBASE-LR<br>10GBASE-SR |
|   | Interfaces             | 24 10/100/1000Mbps POE ports<br>4 10G SFP+Slots<br>1 RJ45 Console Port<br>1 Micro-USB Console Port   |
| Performance   | Switching Capacity     | 128Gbps  |
|   | Packet Forwarding Rate | 95.3Mpps   |
|   | MAC Address Table      | 32K  |
|   | Flash memory capacity  | 256MB  |
|   | The memory capacity    | 2G   |
|   | Jumbo Frame            | 12KB   |
| PoE Support   | PoE port               | 24   |
|   | PoE protocol           | 802.3af, 802.3at   |
|   | PoE pinout             | 1,2,3,6  |
|   | PoE management mode    | Supported  |
| Physical & Environment  | Certification          | CE, FCC  |
|   | Power Supply           | DC48~72V/AC 100-240V 50-60HZ   |
|   | Max Power Consumption  | 450W (220V/50Hz)   |
|   | Max Heat Dissipation   | 220.69 BTU/h   |
|   | Dimensions (W × D × H) | 17.3 × 16.5 × 1.7 in. (440 × 250 × 44 mm)  |
|   | Fan design             | No fan design, natural heat dissipation  |
|   | Operating Temperature  | -40°C~+85°C  |
|   | Storage Temperature    | -40°C~+85°C  |
|   | Operating Humidity     | 5%~95% does not support condensation (non-condensing)  |
|   | Storage Humidity       | 5%~95% does not support condensation (non-condensing)  |
| <b>Physical Stacking</b>  |                        |  |
| Installable SFP+ Transceivers and Direct Attach Copper (DAC) Cables |                        | 10G-SR,<br>10G-LR,<br>10G-CU1M,<br>10G-CU3M  |
| <b>Software Features</b>  |                        |  |

|              |  |   |
|--------------|--|---|
| L3 Features  | <ul style="list-style-type: none"> <li>-L3 Routing           <ul style="list-style-type: none"> <li>*128 IPv4 Interface entries</li> <li>*256 IPv4 Static Routing entries</li> <li>*8K IPv4 Dynamic Routing entries</li> </ul> </li> <li>-RIP v1, v2</li> <li>-OSPF v1, v2, V3</li> <li>-IGMP v1, v2, v3</li> </ul>  | <ul style="list-style-type: none"> <li>-Multicast Routing           <ul style="list-style-type: none"> <li>*Static Multicast Route</li> <li>*PIM-DM/SM</li> </ul> </li> <li>-ARP Proxy</li> <li>-DHCP Server/Relay</li> <li>-VRRP</li> <li>-BFD</li> </ul>  |
| L2 Features  | <ul style="list-style-type: none"> <li>-Link Aggregation           <ul style="list-style-type: none"> <li>*static link aggregation</li> <li>*802.3ad LACP</li> </ul> </li> <li>*Up to 64 aggregation groups, containing 8 ports per group</li> <li>-Spanning Tree Protocol           <ul style="list-style-type: none"> <li>*802.1D STP</li> <li>*802.1w RSTP</li> <li>*802.1s MSTP</li> <li>*32 MSTP Instance</li> <li>*STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>-Loopback Detection</li> <li>-Flow Control           <ul style="list-style-type: none"> <li>*802.3x Flow Control</li> </ul> </li> <li>-Port Mirroring           <ul style="list-style-type: none"> <li>*One-to-One</li> <li>*Many-to-One</li> <li>*Flow-Based</li> <li>*Tx/Rx/Both</li> </ul> </li> <li>-LLDP, LLDP-MED</li> </ul> |
| L2 Multicast | <ul style="list-style-type: none"> <li>-1024 IGMP groups</li> <li>-IGMP Snooping           <ul style="list-style-type: none"> <li>*IGMP v1/v2/v3 Snooping</li> <li>*IGMP Fast Leave</li> <li>*MVR</li> <li>*IGMP Snooping Querier</li> <li>*Limited IP Multicast</li> <li>*Static Multicast Forwarding</li> </ul> </li> </ul>  | <ul style="list-style-type: none"> <li>-MLD Snooping           <ul style="list-style-type: none"> <li>*MLD v1/v2 Snooping</li> <li>*MLD Snooping Querier</li> <li>*Fast Leave</li> <li>*Limited IP Multicast</li> <li>*Static Multicast Forwarding</li> </ul> </li> </ul>   |
| VLAN         | <ul style="list-style-type: none"> <li>-VLAN Group           <ul style="list-style-type: none"> <li>*4K VLAN Groups</li> </ul> </li> <li>-802.1Q tag VLAN</li> <li>-MAC VLAN</li> <li>-Protocol VLAN</li> </ul>  | <ul style="list-style-type: none"> <li>-VLAN VPN (QinQ)</li> <li>-GVRP</li> <li>-Private VLAN</li> </ul>  |
|              | <ul style="list-style-type: none"> <li>-Class of Service           <ul style="list-style-type: none"> <li>*Port Priority</li> <li>*802.1p CoS/DSCP priority</li> </ul> </li> </ul>   | <ul style="list-style-type: none"> <li>-Diffserv           <ul style="list-style-type: none"> <li>*Diffserv Class</li> <li>*Diffserv Policy</li> </ul> </li> </ul>  |

|            |   |  |
|------------|---|--|
| QoS        | <ul style="list-style-type: none"> <li>*8 Priority Queues</li> <li>*Queue Schedule Mode</li> <li>-Bandwidth Control</li> <li>*Port/Flow based Rating Limiting</li> <li>*Storm Control</li> </ul>  | <ul style="list-style-type: none"> <li>*Diffserv Service</li> <li>-Auto-VoIP</li> <li>-Voice VLAN</li> </ul>   |
| ACL        | <ul style="list-style-type: none"> <li>-Supports up to 3328 entries</li> <li>-MAC ACL           <ul style="list-style-type: none"> <li>*Source MAC</li> <li>*Destination MAC</li> <li>*VLAN ID</li> <li>*User Priority</li> <li>*EtherType</li> </ul> </li> <li>-Standard IP ACL           <ul style="list-style-type: none"> <li>*Source IP</li> <li>*Destination IP</li> </ul> </li> <li>-Time based ACL</li> </ul>   | <ul style="list-style-type: none"> <li>-Extended IPACL           <ul style="list-style-type: none"> <li>*Source IP</li> <li>*Destination IP</li> <li>*Fragment</li> <li>*IP Protocol</li> <li>*TCP Flag</li> <li>*TCP/UDP Port</li> <li>*DSCP/IP TOS</li> </ul> </li> </ul>  |
| Security   | <ul style="list-style-type: none"> <li>-AAA</li> <li>-DHCP Snooping</li> <li>-IP-MAC-Port Binding:Up to 32768 entries</li> <li>-ARP Inspection:Up to 32768 entries</li> <li>-IP Source Guard:Up to 1020 entries</li> <li>-Static/Dynamic Port Security</li> <li>-Up to 64 MAC addresses per port</li> <li>-Broadcast/Multicast/Unicast Storm Control           <ul style="list-style-type: none"> <li>*kbps/ratio/pps control mode</li> </ul> </li> <li>-IP/Port/MAC based access control</li> <li>-DoS Defend</li> </ul> | <ul style="list-style-type: none"> <li>-802.1X           <ul style="list-style-type: none"> <li>*Port based authentication</li> <li>*MAC(Host) based authentication</li> <li>*Guest VLAN</li> <li>*Support Radius authentication and accountability</li> </ul> </li> <li>-Port Isolation</li> <li>-MAC Filtering</li> <li>-Secure web management through HTTPS with SSLv3/TLS1.0</li> <li>-Secure Command Line Interface(CLI) management with SSHv1/SSHv2</li> </ul> |
| Management | <ul style="list-style-type: none"> <li>-Web-based GUI</li> <li>-Command Line Interface(CLI) through console port, telnet</li> <li>-SNMPv1/v2c/v3</li> <li>-SNMP Trap/Inform</li> <li>-RMON (1,2,3,9 groups)</li> <li>-DHCP Option82</li> </ul>  | <ul style="list-style-type: none"> <li>-CPU Monitoring</li> <li>-Cable Diagnostics</li> <li>-Access Control</li> <li>-SNTP</li> <li>-System Log</li> <li>-Dual Image</li> <li>-IPv6 Management</li> </ul>  |

|      |   |   |
|------|---|---|
|      |   | <ul style="list-style-type: none"> <li>-PPPoE Circuit ID</li> <li>-HTTP/TFTP File Transfer</li> </ul>   |
| MIBs | <ul style="list-style-type: none"> <li>-MIB II (RFC1213)</li> <li>-Interface MIB (RFC2233)</li> <li>-Ethernet Interface MIB (RFC1643)</li> <li>-Bridge MIB (RFC1493)</li> <li>-P/Q-Bridge MIB (RFC2674)</li> <li>-RMON MIB (RFC2819)</li> </ul> | <ul style="list-style-type: none"> <li>-RMON2 MIB (RFC2021)</li> <li>-Radius Accounting Client MIB (RFC2620)</li> <li>-Radius Authentication Client MIB (RFC2618)</li> <li>-Remote Ping, Traceroute MIB (RFC2925)</li> <li>-Support JHA private MIBs</li> </ul> |

## ◆ Product Size

