

# 8 Port Management Fiber Ethernet Switch

## JHA-SW08MGH



### ◆ Overview

The JHA-SW08MGH series is a high performance 8 ports, L2/L3 managed 1G/10G Ethernet switch with eight 1G/10G SFP+ ports. The switch supports STP/RSTP/MSTP. It also supports Web-based network management, VLAN, QoS, SNMP, IGMP snooping and other network functions. LED indicators provide the connection status when using SFP option.

8× 10-Gigabit ports unlock the highest performance of your 10G/Multi-Gig bandwidth and devices, and provide up to 160 Gbps of switching capacity. Lightning-Fast Connections. Provides lightning-fast connections to 10G NAS, Server, 10G PCIe Adapter/ NIC, gaming computer, 10G WiFi 6 AP, 8K video, and more. Ideal for Various Scenarios. Built for lightning-fast connections in business and home offices, workstations, LAN parties, and home entertainment.

### ◆ 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

Hardware Features & Performance		
Model	JHA-SW08MGH	
General	Standard and Protocols	IEEE 802.3i 10BASE-T Ethernet IEEE 802.3u 100BASE-TX/FX IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-X IEEE 802.3ae 10GBASE-SR/LR IEEE 802.3av GVRP IEEE 802.3x Flow control IEEE 802.3ad Link Aggregation IEEE 802.1v Protocol VLAN IEEE 802.1d Spanning Tree Protocol (STP) IEEE 802.1s Rapid Spanning Tree (RSTP) IEEE 802.1w Multiple Spanning Tree (MSTP) IEEE 802.1q VLANs / VLAN tagging IEEE 802.1x Network Login Security IEEE 802.1p QoS
	Network Media	10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) 100BASE-TX/1000Base-T: UTP category 5, 5e or above cable (maximum 100m) 1000BASE-X: MMF, SMF 10GBASE-LR 10GBASE-SR

	Interfaces	8 10G SFP+Slots 1 RJ45 Console Port
Performance	Switching Capacity	160Gbps
	Packet Forwarding Rate	120Mpps
	MAC Address Table	16K
	Flash memory capacity	256MB
	The memory capacity	2G
	Jumbo Frame	12KB
Physical& Environment	Certification	CE, FCC
	Power Supply	100-240V AC, 50/60Hz
	Max Power Consumption	27W (220V/50Hz)
	Max Heat Dissipation	220.69 BTU/h
	Dimensions (W × D × H)	250 × 150 × 45 mm
	Fan Quantity	2 removable fan module
	Operating Temperature	0°C~50°C (32°F~104°F)
	Storage Temperature	-40°C~70°C (-40°F~158°F)
	Operating Humidity	10% ~ 90%RH, non-condensing
	Storage Humidity	5%~90%RH, non-condensing
<b>Physical Stacking</b>		
Installable SFP+ Transceivers and Direct Attach Copper (DAC) Cables		10G-SR, 10G-LR, 10G-CU1M, 10G-CU3M
Max Number of Stacking Ports Installable		8 SFP+
Stacking Speed (Per Port)		20Gbps (Full-Duplex)
<b>Software Features</b>		
Stack	-Physical Stacking *Up to 1408Gbps of Backplane when 8 units in the stack *Up to 8 units per stack	
L3 Features	-L3 Routing *128 IPv4 Interface entries *256 IPv4 Static Routing entries *8K IPv4 Dynamic Routing entries -RIP v1, v2 -OSPF v1, v2, V3	-Multicast Routing *Static Multicast Route *PIM-DM/SM -ARP Proxy -DHCP Server/Relay -VRRP -BFD

	-IGMP v1, v2, v3	
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> <li>*Up to 64 aggregation groups, containing 8 ports per group</li> </ul> </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> </ul> </li> <li>*Flow-Based</li> <li>*Tx/Rx/Both</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>
QoS	<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> <li>*8 Priority Queues</li> <li>*Queue Schedule Mode</li> </ul> </li> <li>-Bandwidth Control                             <ul style="list-style-type: none"> <li>*Port/Flow based Rating Limiting</li> <li>*Storm Control</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> <li>*Diffserv Service</li> </ul> </li> <li>-Auto-VoIP</li> <li>-Voice VLAN</li> </ul>

<p>ACL</p>	<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 basedACL</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>
<p>Security</p>	<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>
<p>Management</p>	<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> <li>-PPPoE Circuit ID</li> <li>-HTTP/TFTP File Transfer</li> </ul>
	<ul style="list-style-type: none"> <li>-MIB II (RFC1213)</li> <li>-Interface MIB (RFC2233)</li> </ul>	<ul style="list-style-type: none"> <li>-RMON2 MIB (RFC2021)</li> <li>-Radius Accounting Client MIB (RFC2620)</li> </ul>

MIBs	-Ethernet Interface MIB (RFC1643) -Bridge MIB (RFC1493) -P/Q-Bridge MIB (RFC2674) -RMON MIB (RFC2819)	-Radius Authentication Client MIB (RFC2618) -Remote Ping, Traceroute MIB (RFC2925) -Support TP-Link private MIBs
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