### **MES7112G-4GF-8GT**

12-Port Layer 2 Gigabit Managed Embedded Industrial Ethernet Switch



- Support 4 Gigabit SFP ports, 8 Gigabit copper ports
- Support the ring network redundancy protocols such as MW-Ring, ERPS and STP/RSTP/MSTP to improve the network reliability
- Fast Ring Redundancy (MW-Ringv1/v2) <20ms enhances the reliability of system communication
- Supporting QoS service quality, priority mapping based on 802.1P/DSCP/port, improving communication quality
- Support DC9~24V power input
- Working temperature from -40  $^{\circ}$ C to +75  $^{\circ}$ C











### **Product Description**

MES7112G-4GF-8GT is a layer 2 gigabit managed embedded industrial ethernet switch with 4 Gigabit SFP ports and 8 Gigabit copper ports. This switch adopts a storage and forward mechanism, with powerful bandwidth processing capabilities, automatically troubleshooting data packet errors, reducing transmission failures, and easily supporting 1000Mbps networking to ensure stable, reliable, and efficient data transmission. It uses industrial grade components, combined with high standard system design and production control, embedded installation method, operating at a wide temperature range of -40 °C to+75 °C to adapt to various harsh working environments.

The MES7112G-4GF-8GT follows the main communication standards in the industrial field, meeting technical requests of real-time communication and network security. It provides multiple ways to manage switches, such as accessing the switch command line (CLI) through the CONSOLE port or TELNET/SSH protocol, accessing the switch web interface through HTTP/HTTPS, and accessing the device MIB through the SNMP protocol. It supports multiple network protocols and industry standards, such as MW-Ring, EAPS, ERPS, STP/RSTP/MSTP, VLAN, GVRP, QoS, LACP, IGMP Snooping, GMRP, LLDP, 802.1X, ACL, SNTP, port mirroring, Ping, Tracert, etc. It supports system management such as uploading and downloading configuration files, and upgrading image files online. The product is widely applicable in fields such as comprehensive energy, smart cities, rail transit, intelligent transportation, smart factories, and industrial automation.





#### Features and Benefits

- Support storm suppression for broadcast, multicast, and unknown unicast messages, detect broadcast and multicast packet storms, and prevent broadcast storms
- Support link static aggregation and dynamic aggregation LACP, which can increase transmission bandwidth, improve link reliability and realize network load balance
- Support 802.1Q VLAN, provide Access, Trunk, Hybrid interface easy to divide multiple broadcast domain, enhance the security of the network
- Support VLAN division based on port, MAC, protocol, IP subnetwork, etc., which can be applied to networks in different environments
- Support GVRP protocol, realize dynamic distribution, registration and propagation of VLAN attributes, and maintain dynamic VLAN
- Support the MAC address table and the aging time limit, and the static unicast / multicast MAC address is bound with the interface, to ensure the use of legitimate users
- Support IGMP Snooping, GMRP multicast protocol, reduce multicast data broadcasting in the network, and save network resources
- Support LLDP link layer discovery protocol, obtains LLDP neighbor device information, monitors link status, facilitates topology management and fault localization
- Support ERPS Ethernet multi ring protection technology, provide multi ring networking, perform link backup, achieve fast convergence, and improve network stability
- Support EAPS loop protection protocol and MW-RingV2 private ring network protocol, enhance the reliability of system communication
- Support STP, RSTP, MSTP generating tree protocol, which can eliminate network loop and improve network reliability
- Support loop back detection to prevent the network from ring and causing the network storm
- Support HTTP, HTTPS, TELNET, SSH network access mode, SSH can provide a secure remote login
- Support SNMPv1/v2c/v3, information query, information modification and troubleshooting through the MIB network management system, to achieve centralized management
- Support QoS service quality, give priority to voice, video and important data in network devices, and solve network congestion
- Support ACL access control list, filtering TCP/UDP/ICMP/IGMP messages based on source/destination IP and MAC address
- Support 802.1X port authentication, authentication and access control for access users





Software				
Switching	Support port configuration, port speed limit, storm suppression, storm detection, static port trunk, LACP Support 802.1Q VLAN, port / MAC / subnet / protocol based VLAN division, GVRP, port isolation Support MAC address aging, static MAC address forwarding and filtering, MAC address binding and learning restrictions			
Redundancy	Support MW-RingV2 private ring network technology Support EAPS, ERPS Support STP/RSTP/MSTP			
Multicast	Support IGMP Snooping Support static multicast GMRP			
Security Management	Support HTTP, HTTPS, TELNET, and SSH access mode Support ACL and filtering data on the L2-L4 layer Support 802.1X port authentication and MAC address authentication Support lookback detection and alarm			
Management and Maintenance	Support QoS, SNMP v1/v2c/v3, SNMP v1/v2c TRAP, LLDP Support port mirror, Ping, Tracert Support user rights management, system logs, local time setting synchronization, and SNTP network time synchronization Support online restart, factory reset, system upgrade, configuration file upload / download Support one master software management			
Switch Capability				
Processing Type	Store-and-Forward			
Backplane Bandwidth	24Gbps			
Buffer Size	4Mbit			
MAC Table Size	8K			
Interface				
Gigabit Fiber port	4*1000Base-X Gigabit SFP port, compatible with 100Base-FX			
Gigabit Copper port	8*10/100/1000Base-T(X) auto-sensing copper ports, full/half duplex, auto MDI/MDI-X			
Alarm	1 relay alarm output and 2 voltage alarm inputs, 3.81 mm pitch 6-pin terminal block			
CONSOLE	1 CONSOLE port, RS232 signal RJ45 port, used for device debugging			
Button	Restart and factory reset			



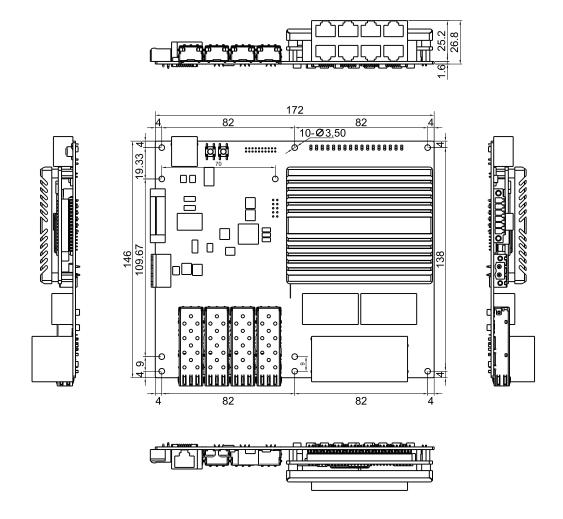
## ☑ = Specification

Status LED	Power LED, operation LED, alarm LED, port LED			
Power Supply				
Input Voltage	DC9~24V, anti reverse connection			
Power Consumption	<12W@DC24V(full load)			
Connection	5.08mm pitch 2-pin terminal block			
Physical Characteristics				
Dimensions	172×146×26.8(mm)			
Installations	Embedded			
Weight	About 0.4kg			
Working Environment				
Operating Temp	-40℃~+75℃			
Storage Temp	-40℃~+85℃			
Relative Humidity	5%~95% (non-condensing)			



# Dimensions

Unit: mm







# Ordering Information

Standard Model	Gigabit SFP port	Gigabit Copper port	Input Voltage
MES7112G-4GF-8GT	4	8	DC9~24V



### **Wuhan Maiwe Communication Co., Ltd**

Address: No.52 Liufang Avenue, East lake High-tech

Development Zone, Wuhan, China.

Tel: 027-87170217

Mail: enquiry@maiwe.com Official site: www.maiwe.com

Copyright © Maiwe Communication All rights reserved