

# MES5105M

## 5-Port Layer 2 Managed Embedded Industrial Fast Ethernet Switch



- 2/3\*100M fiber ports and 3/2\*100M copper ports
- Support ring network redundancy protocols such as MW-Ringv1/v2, STP/RSTP
- Fast ring redundancy with less than 20ms (MW-Ringv1/v2) improves system communication reliability
- Support DC 5~32V power input, comply with intrinsically safe circuit design standards
- Operate in harsh industrial environments ranging from -40°C ~ +75°C



### Product Description

MES5105M series is a layer 2 100M managed embedded ethernet switch. It supports 5\*100M Ethernet ports, including fiber and copper ports. The switch adopts a store-and-forward mechanism and has powerful bandwidth processing capabilities to automatically troubleshoot data packet errors, reduce transmission failures, and ensure stable, reliable, and efficient data transmission. In line with high-standard system design and production control, it adopts embedded

installation method, operates in a wide temperature range of  $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$ , can adapt to various harsh working environments, and has stable communication performance.

MES5105M series supports a range of features and network protocols, such as MW-Ringv1/v2, STP/RSTP, VLAN, QoS, port mirroring, static multicast binding, MAC address binding, network diagnosis, alarm and system online upgrade which can improve the performance, reliability and security of the network and meet the needs of requirements of various complex networks. The switch meets the demands of complex networks and harsh industrial environments and can be widely applied in areas such as comprehensive energy, smart cities, rail transportation, intelligent traffic, smart factories, industrial automation, and more.



## Features and Benefits

- Support broadcast, multicast and unknown unicast packet egress and ingress rate limits
- Support unknown unicast, unknown multicast, known multicast and broadcast packet rate limiting to suppress network storms
- Support QoS quality of service, allowing voice, video and important data to be transmitted preferentially in network equipment to solve network congestion
- Support 802.1Q VLAN and provides Access, Trunk, and Hybrid interfaces to easily divide multiple broadcast domains and enhance network security
- Support static multicast MAC address binding, reducing the broadcast of multicast data in the network and saving network resources
- Support port mirroring, which can collect port inlet and outlet data for network detection and fault management
- Support RSTP (Rapid Spanning Tree Protocol) compatible with STP (Spanning Tree Protocol) to eliminate network loops and enhance network reliability
- Support port statistics, including different types of data frames sent and received, and monitors port

traffic

- Support visitors and administrators, and hierarchical management of users with different permissions
- Support online restart, factory reset and system upgrade



## Specification

Software	
Switching	Support port configuration, port rate limiting, storm detection, port aggregation, and port statistics Support 802.1Q VLAN, port-based VLAN Support MAC address aging
Redundancy	Support MW-Ringv1/v2 proprietary ring network technology Support ERPS (Ethernet Ring Protection Switching) Support RSTP (Rapid Spanning Tree Protocol) and is compatible with STP (Spanning Tree Protocol)
Multicast	Support static multicast MAC address binding
Management and Maintenance	Support static IP Support QoS quality of service, 802.1P/DSCP/port priority mapping, absolute and relative priority control Support port mirroring, ping, alarm Supports user management with different permissions, online restart, factory settings restoration, system upgrade, and configuration file upload/download Support MixView, MaxView management
Switch Capability	
Processing Type	Store-and-Forward
Backplane Bandwidth	1.2Gbps
Buffer Size	768kbit
MAC Table Size	2K
Interface	
100M Fiber Port	2/3*100Base-FX fiber ports, support single-mode/multi-mode, SC/FC/ST connector, wavelength and transmission distance optional



## Specification

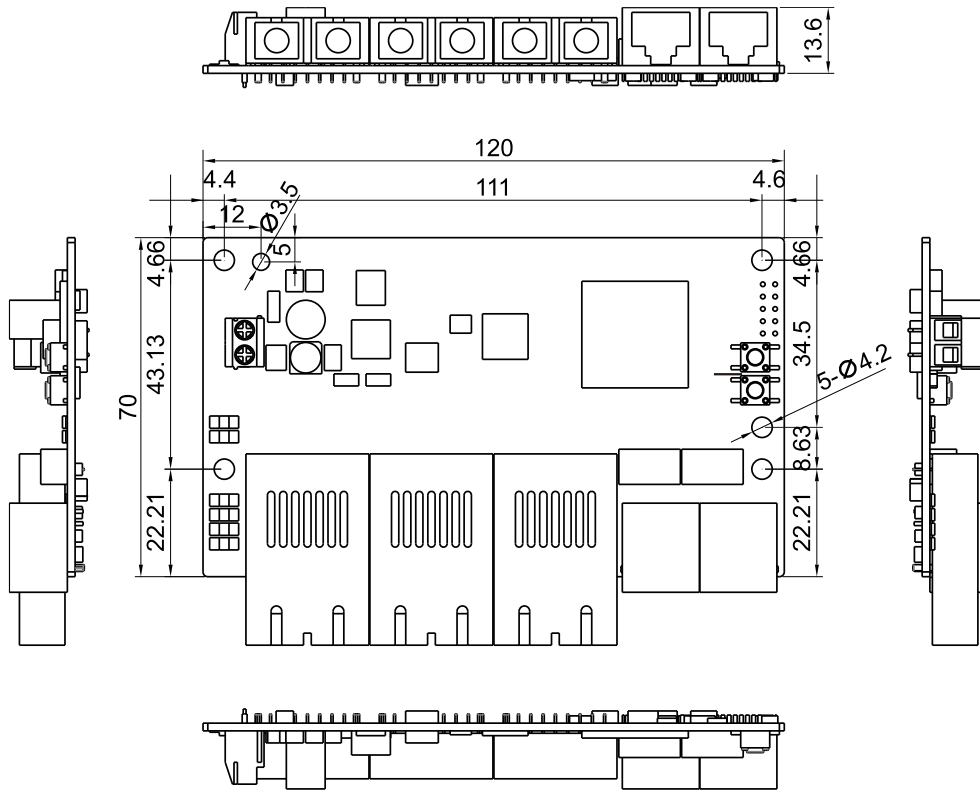
100M Copper Port	3/2*10/100Base-T(X) auto-sensing copper ports, support full/half duplex, auto MDI/MDI-X connection
Button	Restart and factory reset button
Statue LED	Power indicator light, operation indicator light, interface indicator light, electrical port speed indicator light, serial port/CAN indicator light, support external introduction of indicator light signals
<b>Power Supply</b>	
Input Voltage	DC 5-32V, reverse polarity protection
Power Consumption	<3W@DC24V
Connect	2-position 5.08mm pitch locking terminal blocks
<b>Physical Characteristics</b>	
Dimensions	120×70×13.6 mm
Installations	Embedded installation
Weight	80kg
<b>Working Environment</b>	
Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
<b>Industry Standard</b>	
EMC	IEC 61000-4-5 (Surge): Level 2 ※The network port supports 6kV lightning protection IEC 61000-4-4 (EFT): Level 3



## Dimensions

Unit: mm

**MES5105M-3F**





## Ordering Information

Standard Model	100M Fiber Port	100M Copper Port	Input Voltage
MES5105M-2F(M/S)	2	3	DC5-32V
MES5105M-3F(M/S)	3	2	



## Contact Us

### 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](mailto:enquiry@maiwe.com)

Official site: [www.maiwe.com](http://www.maiwe.com)

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