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Make network communication more reliable

# MES5100-24T2S-2HV
# Layer 2 Managed Industrial Ethernet Switch
# Quick Installation Guide


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## 【Package Checklist】

Please check the integrity of package and accessories while first using the switch.

1. Switch ×1
2. Mounting lug x2
3. Power line x2
4. Warranty card
5. Certificate

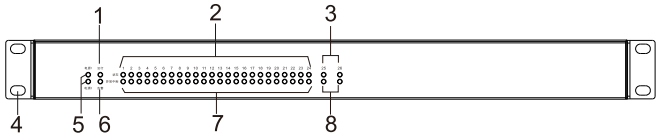
If any of these items are damaged or lost, please contact our company or dealers, we will solve it ASAP.

## 【Product Overview】

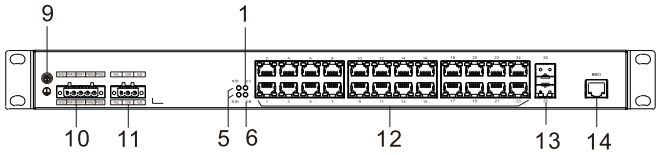
This product is a rack-mounted 100M layer 2 managed industrial Ethernet switch, with the model: MES5100-24T2S-2HV (24 100M Ethernet copper ports + 2 100M SFP slots + 2 110VDC, 220VAC/DC dual power input).

## 【Panel Design】

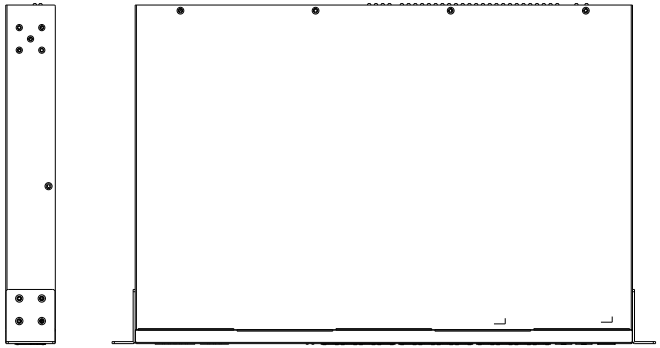
➢ **Rear view**



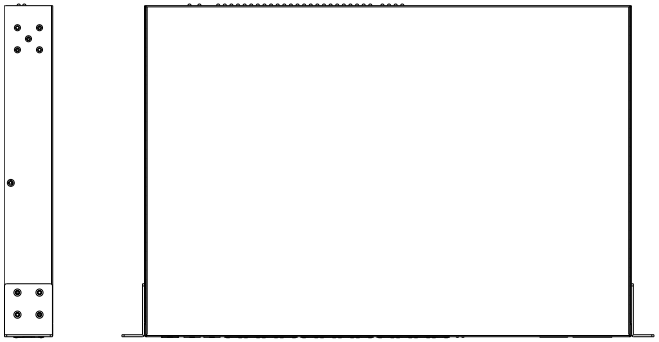

➢ **Front view**




➢ **Right view and top view**



➢ **Left view and bottom view**

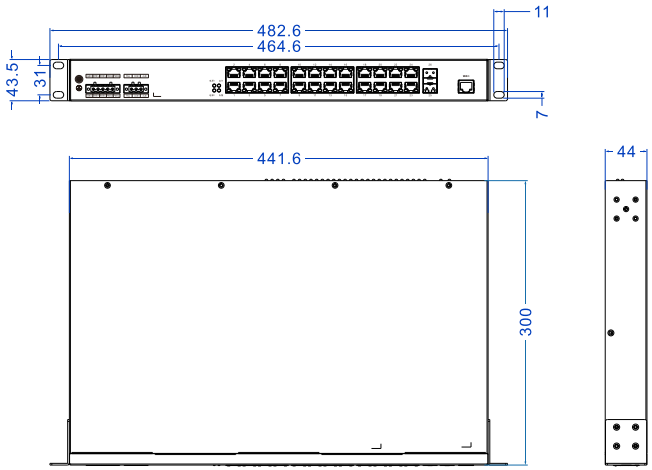


➢ **Bottom view**

1. Run indicator (Run)
2. 100M Ethernet copper port status indicator (1-24)
3. 100M Ethernet fiber port status indicator (25-26)
4. Lugs
5. Power indicator (power1, power2)
6. Alarm indicator (Alarm)
7. 100M Ethernet copper port abnormal interruption indicator (1-24)
8. 100M Ethernet fiber port abnormal interruption indicator (25-26)
9. Grounding screw (M4)
10. Terminal block for power input
11. Relay alarm output terminal block
12. 100M Ethernet copper port (1-24)
13. 100M Ethernet SFP slot (25-26)
14. Console port

## 【Mounting Dimension】

Unit: mm




**Notice Before Mounting:**

- Don't place or install the device in area near water or moisture, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before powering on the device, check the power specifications supported by the device to prevent device damage due to overvoltage.
- The device surface temperature is high after running;

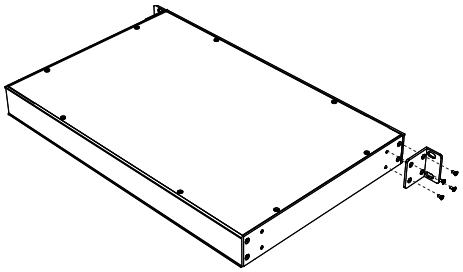
please don't directly contact to avoid scalding.

## 【Install Rack-Mounted Device】

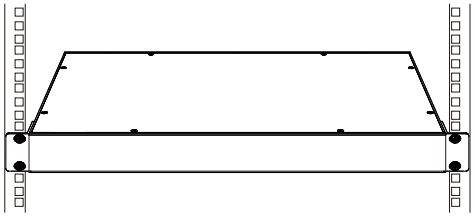
This product adopts 1U rack-mounting, mounting steps are as below:

Step 1 Select the device mounting position and ensure enough mounting size is reserved.

Step 2 Adopt 4 bolts to install the mounting lugs in the device position as figure below.



Step 3 Place the device in the rack; adopt 4 bolts to fix two sides mounting lugs in the rack.



Step 4 Check and confirm the product is mounted firmly on the rack, then mounting ends.

## 【Disassembling Device】

Step 1 Power off the device.

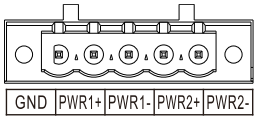
Step 2 Adopt screw driver to loosen the 4 bolts fixed on the mounting lugs in the rack.

Step 3 Shift the device away from the rack, then disassembling ends.

**Notice Before Powering on:**

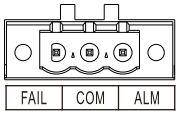
- Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply plug and power on.
- Power OFF operation: First, remove the power plug, and then remove the wiring section of terminal block. Please pay attention to the above operation sequence.
- Please be aware of the power input range supported by the device before powering on. Use the recommended voltage of the device to avoid device damage.

## 【Power Supply Connection】




Adopt 5-pin 5.08mm pitch terminal blocks, and support Power 1 and Power 2 redundant power inputs. The power input supports 1 single power supply input or 2 power supply inputs at the same time; When two power supply input at the same time, it supports redundant backup of power supply. If one power supply fails, the device can still work normally without interruption. The power pin definitions are shown in the figure. The power input supports 110/220VDC or 220VAC.

## 【Relay Connection】




The device uses a 3-pin 5.08mm pitch terminal block. It supports two contacts for device fault (FALL) and device alarm (ALM). Both contacts control the output of faults and alarms by disconnecting or connecting to the COM contacts.

- FAIL and COM form a pair of normally closed contacts. When the device is faulty, the FAIL contact is closed; and when it is normal, the contact is normally open.
- ALM and COM form a pair of normally open contacts. When the device has no alarm output, the ALM contact is open; when the device has an alarm output, the ALM contact is closed.

Both FAIL and ALM can be externally connected to alarm lights, alarm buzzers, or other switch-value acquisition devices, which can promptly alert operators in case of faults or alarms.

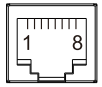
The default status of FAIL is shown in the figure below.

| Device Status | Fall Contact | Alarm |
|---|---|---|
| Not powered on or powered off | Closed | Yes |
| Powered on, working properly | Disconnected | None |

The default status of ALM is shown in the figure below.

| Device Status | ALM Contact | Alarm |
|---|---|---|
| Not powered on or powered off | Disconnected | None |
| Powered on, but not working properly | Closed | Yes |
| Powered on, and working properly without triggering any alarm | Disconnected | None |
| Powered on, and working properly, but it triggered alarms | Closed | Yes |

## 【Console Port Connection】



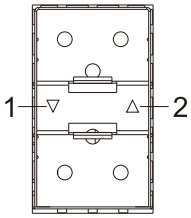

The back panel of the device provides 1 program debugging port based on RS-232 serial port which can conduct device CLI command management after connecting to PC. The interface adopts RJ45 port, and the RJ45 pin definitions are as follows:

| Pin No. | 4 | 5 | 7, 8 |
|---|---|---|---|
| Pin Definition | TXD | RXD | GND |

Connect the CONSOLE port through software. The default configuration is as follows:

| Serial Port Connection | Default |
|---|---|
| Baud rate | 115200 bps |
| Data bit | 8 bits |
| Parity bit | None |
| Stop bit | 1 bit |

## 【View 100M Ethernet Fiber Port Indicator】




Provide 2 100M SFP slots. Each SFP port is equipped with an LED indicator for Link/Act. As shown in the figure:

- Indicator light 1 corresponds to the SFP fiber port below;
- Indicator light 2 corresponds to the SFP

fiber port above.

The definitions of indicator lights are as shown in the table below.

| LED | Definition | Indicate | Description |
|---|---|---|---|
| 1/2 | Link/Act | ON | Ethernet port has established a valid network connection |
| | | Blinking | Ethernet port is in an active network status |
| | | OFF | Ethernet port has not established a valid network connection |

## 【View Other LED Indicators】

Provide LED indicators to monitor device's operating status, which has simplified the overall troubleshooting process. The detailed status of each LED is described in the table below:

| LED | Indicate | Description |
|---|---|---|
| Power1 /Power 2 | ON | Power supply is running normally |
| | OFF | No power module, no power supply, or power failure |
| Alarm | ON | Abnormalities in hardware, software, or configuration |
| | OFF | The device is normal and has no alarm |
| Run | ON | Device is normal |
| | OFF | The device is powered off or the device is abnormal. |
| Status (1-26) | ON | Ethernet port has established a valid network connection |
| | Blinking | Ethernet port is in an active network status |
| | OFF | Ethernet port has not established a valid network connection |
| | OFF | Ethernet port is in normal communication or idle |
| Abnormal interruption (1-26) | ON | Ethernet port communication is interrupted |

## 【Logging in to WEB Interface】

Support WEB management and configuration. Computer can access the device via Ethernet interface. The way of logging in to device's configuration interface via IE browser is shown as below:

Step 1 Configure the IP addresses of computer and the device to the same network segment, and the network between them can be mutually accessed.

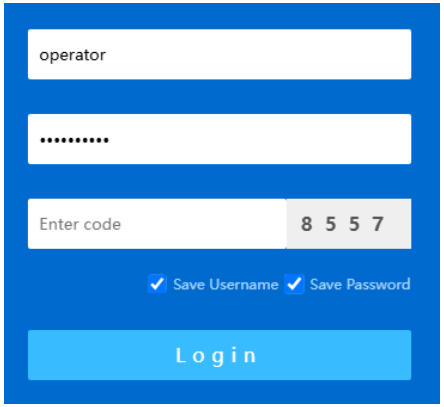
Step 2 Input the IP address of the device into the address bar of the computer browser, and enter the corresponding IP address based on the connected port.

https://192.168.1.254

Note:

The WEB interface is accessible only via HTTPS (HyperText Transfer Protocol Secure) and does not support HTTP (HyperText Transfer Protocol) access.

Step 3 Input the device's username, password, and verification code in the login window, as shown below.




Step 4 Click "Login" button to login to the WEB interface of the device.

**Note:**

- The default IP address of the device is "192.168.1.254".
- The default username for the device is "admin" and the password is "admin@123".
- If the username or password is lost, user can restore it to factory settings via management software; all modified configurations will be cleared after restoring to factory settings, so please backup configuration file in advance. Please refer to user manual for specific configuration method of logging in to WEB interface and other configurations about network management function.

## 【Specification】

| Panel | |
|---|---|
| 100M SFP | 10/100Base-X, SFP slot; with 1 LED indicator |
| 100M copper port | 10/100Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode Self-adaption, MDI/ MDI-X Autotuning |
| Relay | Support 1 relay alarm output and 1 fault output, adopt a 3-pin 5.08mm pitch terminal block, with a current load capacity of 12A@250VAC |
| Console port | CLI command line management port (RS-232), RJ45 |
| Indicator | Power indicator, run indicator, alarm indicator, status indicator, abnormal interruption indicator, Ethernet port Link/Act indicator |
| **Switch Property** | |
| Backplane bandwidth | 12.8Gbps |
| Buffer size | 4.1Mbit |

| | |
|---|---|
| MAC address table | 8K |
| **Power Supply** | |
| Input power supply | • DC: 110/220VDC, dual power supply, anti-reverse connection<br>• AC: 220VAC, dual power supply |
| Connection mode | Adopt 5-pin 5.08mm pitch terminal blocks |
| **Power Consumption** | |
| Normal temperature no load | 4.21W@220VAC |
| Normal temperature full load | 7.01W@220VAC |
| High temperature full load | 7.43W@220VAC |
| **Working Environment** | |
| Working temperature | -40~75℃ |
| Storage temperature | -40~85℃ |
| Working humidity | 5%~95% (no condensation) |
| Protection grade | IP40 (metal shell) |

## 【Disposal of Waste Electrical and Electronic Equipment (WEEE 2012/19/EU)】

(Applicable in the EU-member states)



The crossed-out wheeled bin symbol on the equipment or its packaging indicates that the product, at the end of its service life, shall not be mixed with unsorted municipal waste but should be collected separately, in accordance with local laws and regulations.

A proper separate collection of end-of-life equipment for the subsequent recycling, treatment and environmentally compatible disposal, will help prevent potential damage to the environment and human health, facilitating the reuse, recycling and/or recovery of its component materials.

Private users should contact their vendor or municipal waste management service and ask for disposal information.

Professional users should contact their suppliers and check the terms of their selling agreement.

This product must not be disposed of with other commercial waste.

Users' cooperation in the correct disposal of this product will contribute to saving valuable resources and protecting the environment.