# **3onedata**

# MES5000 Series Managed Industrial Ethernet Switch Quick Installation Guide



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# [Package Checklist]

Please check whether the package and accessories are intact while using the switch for the first time.

- 1. Industrial Ethernet switch 2. CD
- 3. Quick installation guide
- 5. Warranty card
- Certification
   AC power line x2 (only for AC product)

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

## [Product Overview]

The series of product is 28-port 100M/Gigabit managed industrial Ethernet switch. The modules are as follows:

Model I MES5000-4GS-24T (4 Gigabit SFP + 24 100M copper ports)
Model II MES5000-4GS-20T4F (4 Gigabit SFP + 20 100M copper ports + 4 100M fiber ports)
Model III MES5000-4GS-16T8F (4 Gigabit SFP + 16 100M copper ports + 8 100M fiber ports)
Model IV/MES5000-4GS-12T12F (4 Gigabit SFP + 12 100M copper ports + 12 100M fiber ports)
Model V MES5000-4GS-8T16F (4 Gigabit SFP + 8 100M copper ports + 16 100M fiber ports)
Model V IMES5000-4GS-4T20F (4 Gigabit SFP + 4 100M copper ports + 20 100M fiber ports)
Model VII MES5000-4GS-24F (4 Gigabit SFP + 24 100M fiber

ports)

# [Panel Design]



8

10



Model II

12







8. Relay alarm output terminal block

- 9. Power input terminal block (POWER1/POWER2)
- 10. 100M copper port
- 11. 100M fiber port
- 12. Gigabit SFP interface

### [Mounting Dimension]

Unit: mm



# Attention before mounting:

- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

### [Rack-mounting the Device]

- Step 1 Select the device installation location to reserve sufficient size.
- Step 2 Adopt screws to install the mounting lugs in the device position as figure below.



Step 3 Place the device in the rack; adopt 4 screws to install the mounting lugs on the left and right side in the rack.



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

### [Rack-mounting Device Disassembling]

- Step 1 Power off the device.
- Step 2 Unscrew the fixing screw of mounting lug on the rack.
- Step 3 Remove the device from the rack, disassembling ends.

# Note:

- Power ON operation: first connect power line to the connection terminal of device power supply, then power on.
- Power OFF operation: first unpin the power plug, then remove the power line, please note the operation order above.

## [Power Supply Connection]

The device provides 2 3-pin 7.62mm pitch power supply terminal blocks for power input, and support optional AC/DC power supply. Power input supports hot backup function, and provides two pair of input terminal blocks, POWER1 and POWER2, which could be used individually or connected to two independent AC power supply systems. It uses two pairs of terminal blocks to connect to the device at the same time. When any one of the power supply systems fails, the device could operate normally without interruption, which has improved the reliability of network operation.

> DC power supply



DC power supply range: 48VDC (36~72VDC). The sketch map of terminal is as shown above.

AC power supply



AC power supply range: 220VAC (90~264VAC). The sketch map of terminal is as shown above.

# [Relay Connection]



This device provides 2-pin 7.62mm pitch terminal for relay output, and it is integrated with

POWER1 power terminal. Alarm function is controlled by software. They are open circuit in normal non alarm state. This product supports 1 channel relay alarm information output, support DC power alarm information or network abnormal alarm output, it can be connected to alerting lamp, alarm buzzer, or other switching value collecting devices for timely warning operating staffs when alarm information occurs.

## [Console Port Connection]

This device provides 1 program debugging port based on RS232, which could be connected to PC for device CLI command management. The interface adopts RJ45 port. The pin definitions of RJ45 are as follows:

| No.        | 2   | 3   | 5   |
|------------|-----|-----|-----|
| Definition | TXD | RXD | GND |

### 【Checking LED Indicator】

This device provides LED indicators for monitoring the work status of the device, which has simplified the troubleshooting process comprehensively. The function of each LED is described in the table as below:

| LED                           | Status   | Description                        |  |  |
|-------------------------------|----------|------------------------------------|--|--|
| P1, P2                        | ON       | PWR is connected and running       |  |  |
|                               |          | normally                           |  |  |
|                               | OFF      | PWR is disconnected and            |  |  |
|                               |          | running abnormally.                |  |  |
| ALARM OI                      | ON       | Power supply, port link alarm      |  |  |
|                               | OFF      | Power supply, port link without    |  |  |
|                               |          | alarm                              |  |  |
| RUN                           | OFF      | System is not running or running   |  |  |
|                               |          | abnormally                         |  |  |
|                               | Blinking | System is running normally         |  |  |
| Link/Act<br>(1-24)<br>(G1-G4) | ON       | Ethernet port connection is active |  |  |
|                               | Blinking | Data is transmitting               |  |  |
|                               | OFF      | Ethernet port connection is        |  |  |
|                               |          | inactive                           |  |  |

### 【Logging in to WEB Interface】

This device supports 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 Enter device's IP address in the address bar of the computer browser.

#### http://192.168.1.254/

Step 3 Enter device's username and password in the login window as shown below.

Windows Security
The server 192.168.1.254 is asking for your user name and password. The server reports that it is from Communication Device.
Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.
admin12345
.....
Remember my credentials
OK Cancel

Step 4 Click "OK" 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 and password of the device is "admin12345".
- If the username or password is lost, user can restore it to factory settings via device DIP switch or 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            |                                    |
|------------------|------------------------------------|
| Gigabit SFP      | 1000Base-SFP, SFP slot             |
| 100M copper port | 10/100Base-T(X) self-adaptive      |
|                  | RJ45 port, self-adaptive full/half |
|                  | duplex mode or forced work         |
|                  | mode, MDI/MDI-X self-adaption      |
| 100M fiber port  | 100Base-FX, optional SC/ST/FC      |
|                  | interface                          |

| Console port           | CLI command management port<br>(RS-232), RJ45   |  |
|------------------------|---|--|
| Alarm interface        | 2-pin 7.62mm pitch terminal<br>blocks, 1 relay alarm output, the<br>current loading capability is<br>5A@30VDC or 10A@125VAC   |  |
| Indicator              | Power indicator, run indicator,<br>interface indicator, alarm<br>indicator  |  |
| Exchange attributes    |   |  |
| Backplane bandwidth    | 12.8G   |  |
| Packet buffer size     | 3Mbit   |  |
| MAC table size         | 8К  |  |
| Power supply           |   |  |
| Input power supply     | Dual power supply redundancy,<br>optional AC/DC power supply.<br>AC voltage input: 220 VAC<br>(90~264 VAC)<br>Support 8A over-current<br>protection<br>DC voltage input: 48 VDC<br>(36~72 VDC)<br>Support 5.5A over-current<br>protection |  |
| Input terminal         | 3-pin 7.62mm pitch terminal blocks  |  |
| Consumption            |   |  |
| No-load                | 19.4W@220VAC  |  |
| Full-load              | 21.9W@220VAC  |  |
| Working<br>environment |   |  |
| Working temperature    | -40∼75℃   |  |
| Storage temperature    | -40~85°C  |  |
| Working humidity       | 0% $\sim$ 95%(no condensation)  |  |
| Protection grade       | IP40 (metal shell)  |  |