3onedata
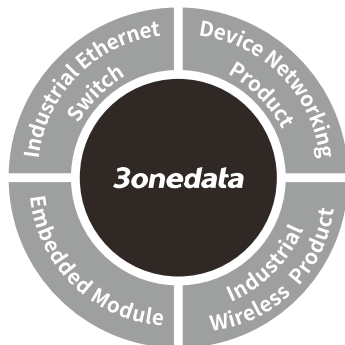Make network communication more reliable

ICS6424 Series
Managed Industrial Ethernet Switch
Quick Installation Guide

3onedata Co., Ltd.

Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Xili, Nanshan District, Shenzhen

Website: www.3onedata.com

Tel: +86 0755-26702688

Fax: +86 0755-26703485

【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
4. DIN-Rail mounting kit
5. Certification
6. Warranty card

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 are managed DIN-Rail industrial 10 gigabit layer 3 Ethernet switches. Module as follow:

Model I   ICS6424-12GT4GS4XS-2P48 (12 gigabit copper ports+4 gigabit SFP slots +4 10 gigabit SFP+ slots+2 12~48VDC power supplies)
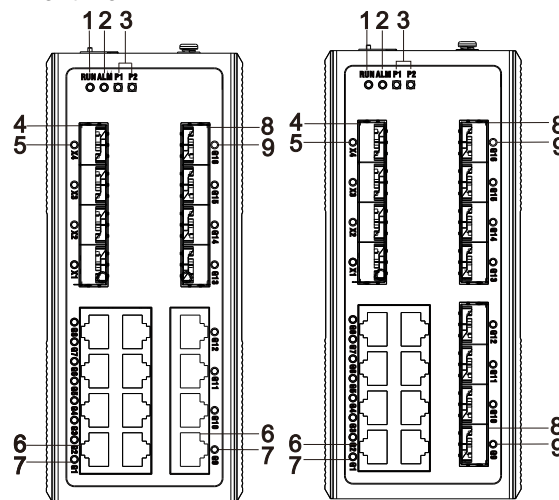
Model II   ICS6424-8GT8GS4XS-2P48 (8 gigabit copper ports + 8 gigabit SFP slots +4 10 gigabit SFP+ slots +2 12~48VDC power supplies)

Model III   ICS6424-8GT8GS-2P48 (8 gigabit copper ports + 8 gigabit SFP slots+2 12~48VDC power supplies)

Model IV   ICS6424-12GT4GS-2P48 (12 gigabit copper ports + 4 gigabit SFP slots+2 12~48VDC power supplies)
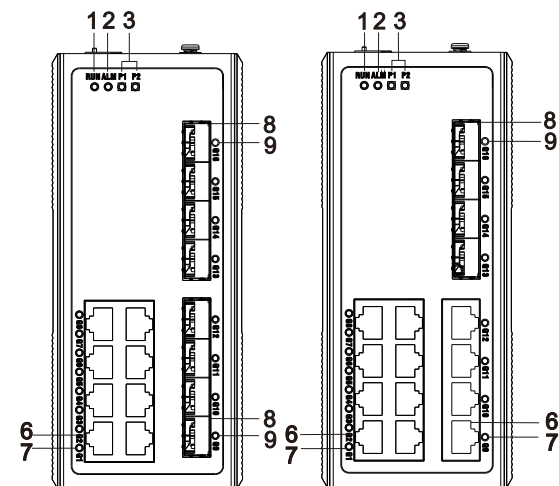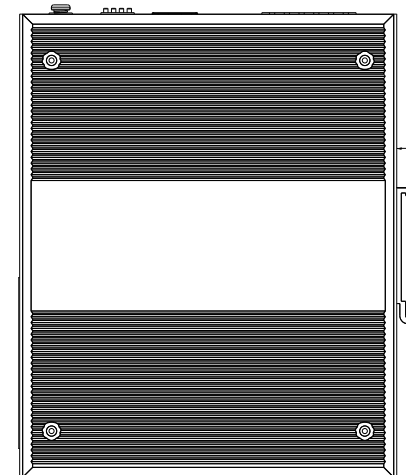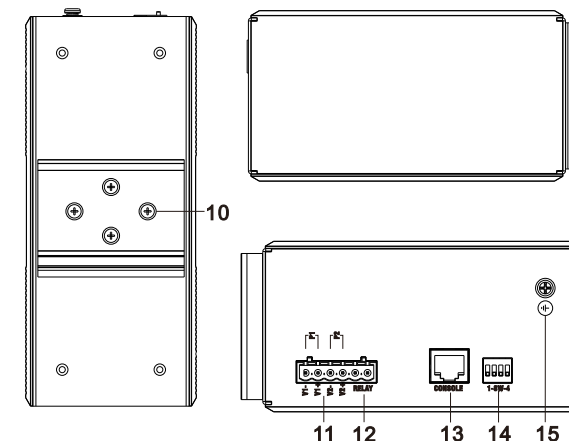
【Panel Design】

➢ **Front view**

Model I

Model II

Model III

Model IV

➢ **Side view**

➢ **Rear view , Bottom view and Top view**

1. Device running indicator RUN
2. Alarm status indicator ALM
3. Power supply indicator P1/P2
4. 10 gigabit SFP + slot （10 gigabit/gigabit self-adaption）
5. 10 gigabit SFP + port connection indicator
6. Gigabit copper port
7. Gigabit copper port connection indicator
8. Gigabit SFP slot
9. Gigabit SFP port connection indicator

10. DIN-Rail mounting deck
11. Power input terminal block
12. Relay alarm output terminal block
13. Console port
14. DIP switch
15. Grounding screw

【Mounting Dimension】

Unit: mm
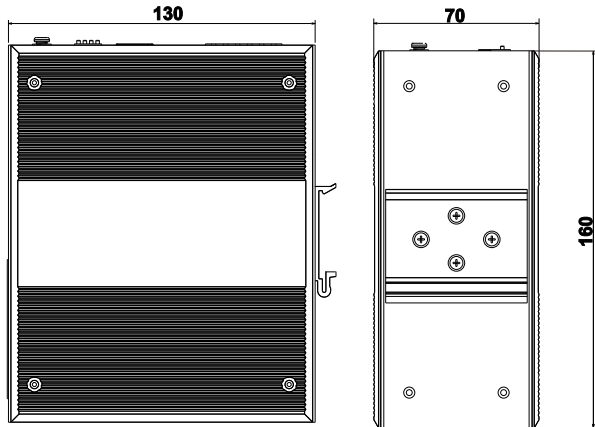
⚠ Note before mounting:

● 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.

【DIN-Rail Mounting】

For convenient usage in industrial environments, the product adopts 35mm DIN-Rail mounting, mounting steps as below:
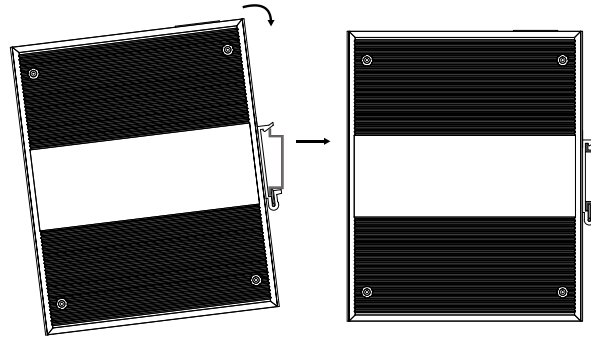

Step 1   Check if the DIN-Rail mounting kit is installed firmly.
Step 2   Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the top into DIN-Rail.

Tips:

Insert a little to the bottom, lift upward and then insert to the top.

Step 3   Check and confirm the product is firmly installed on DIN-Rail, then mounting ends.

【Disassembling DIN-Rail】

Step 1   Device power off.
Step 2   After lift the device upward slightly, first shift out the top of DIN-Rail mounting kit, then shift out the bottom of DIN-Rail, disassembling ends.

【Power Supply Connection】

➢ **DC power supply**
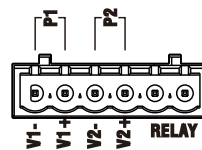
The series devices provide 6-pin 5.08mm pitch input terminal blocks. The power supply occupies 4 pins and provides two independent DC power supply systems, P1 and P2. The power supply also has anti-reverse connection.
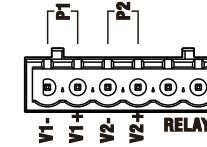
Power supply range: 12 ~ 48VDC

⚠ 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.

【Relay Connection】

This series of products provide 6-pin 5.08mm pitch input terminal blocks, relay occupies 2 pins. Relay terminals are a pair of normally open contacts in device alarm relay. They are open circuit in normal non alarm state, closed when any alarm information occurs. Such as: it's closed when power off, and send out alarm. This series switches support 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 to warn operators timely when alarm information occurs.

【DIP Switch Setting】
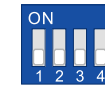
Provide 4-pin DIP switch for function setting, where "ON" is enable valid terminal. Powering off and then powering on the DIP switch is needed to change its status.

DIP switch define as follows:

PIN	1	2	3	4
Definition	Restore factory setting	Reserved	Reserved	Reserved

【Console Port Connection】

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

PIN	2	3	5
Definition	TXD	RXD	GND

【Checking LED Indicator】

This device provides LED indicators to monitor device's operating state, which has simplified the troubleshooting process comprehensively. The status of each LED is described in the table below:

| LED	Status	Description
P1-P2	ON	Power supply P1/P2 is connected and running normally
	OFF	Power supply P1/P2 is disconnected and running abnormally
ALM	ON	Power supply or port link is having alarms
	OFF	Power supply or port link has no alarm
RUN	ON	The device is powered on or the device is abnormal.
	OFF	The device is powered off or the device is abnormal.
	Blinking	Blink 1 time/s, the device runs normally
Link/Act (G1-G16, X1-X4）	ON	Ethernet port has established valid network connection
	Blinking	Ethernet port is in active status
	OFF	Ethernet port has not established valid network connection

【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.
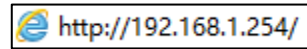
http://192.168.1.254/

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

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 "admin123".

● 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	
10 gigabit SFP slot	10GbE SFP+, 10 gigabit/ gigabit self-adaption
Gigabit SFP slot	1000Base-SFP
Gigabit copper port	10/100/1000Base-T(X), RJ45, automatic flow rate control, full/half duplex or forced operating mode, MDI/MDI-X autotunning
Console port	CLI commend line management port(RS-232), RJ45
Alarm port	6-pin 5.08mm pitch terminal blocks (relay occupies 2 pins), support 1 relay alarm output, current load capacity is 1A@30VDC or 0.3A@125VAC
Indicator	Power indicator, run indicator, interface connection indicator, alarm indicator
Switch property	
Backplane bandwidth	128G
Buffer size	12Mbit
MAC address table	16K
Power supply	
Input power supply	Power supply range: 12～48VDC Support dual power supply redundancy, anti-reverse connection, built-in 3A over-current protection
Terminal block	6-pin 5.08mm pitch terminal blocks, power supply occupies 4 pins
Power consumption	
No-load	9.6W@12VDC
Full-load	17.76W@12VDC
Operating environment	
Operating temperature	-40～70℃
Storage temperature	-40～75℃

Operating humidity	5%～95% (no condensation)
Protection grade	IP40 (metal shell)