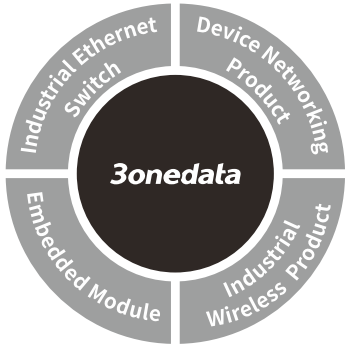
3onedata
Make network communication more reliable

IES6210 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 the integrity of package and accessories while first using the switch.

1. Industrial Ethernet switch
2. DIN-Rail mounting attachment
3. Certification
4. Warranty card

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

【Product Overview】

This series are managed DIN-Rail industrial Ethernet switches. Models as follows:

Model I. IES6210-8T2GC-2P48 (8 100M copper ports + 2 Gigabit Combo ports + 2 12/24/48VDC (9~60VDC) power inputs)

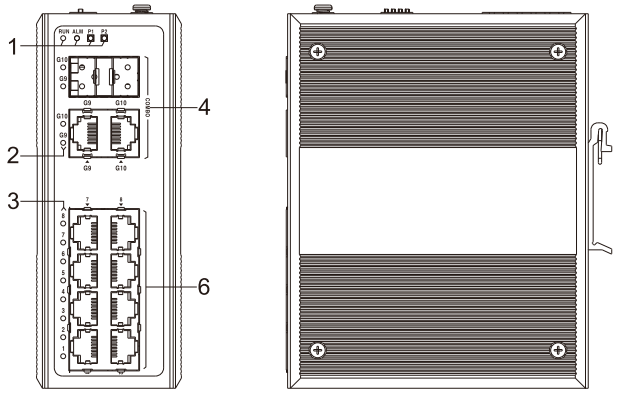
Model II. IES6210-8T2GC-P220 (8 100M copper ports + 2 Gigabit Combo ports + 1 220VAC/DC (85~264VAC/DC) power input).

Model III. IES6210-8P2GC-2P24-120W (8 100M PoE copper ports + 2 Gigabit Combo ports + 2 24VDC power inputs + 120W PoE power)

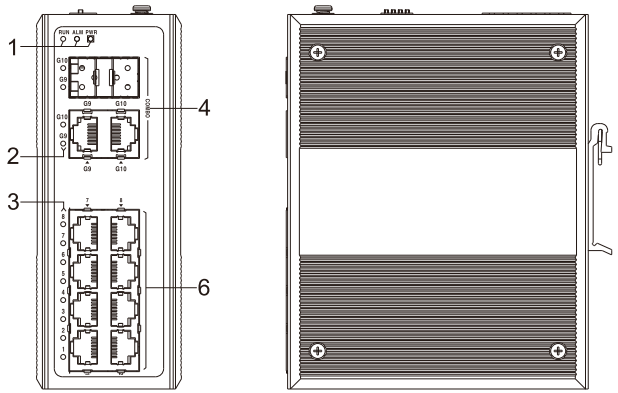
Model IV. IES6210-8P2GC-2P48-240W (8 100M PoE copper ports + 2 Gigabit Combo ports + 2 48VDC (44~57VDC) power inputs + 240W PoE power)

【Panel Design】

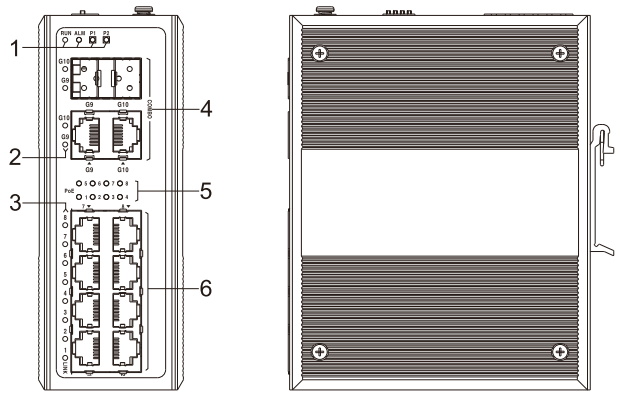
➢ **Front view and right view**



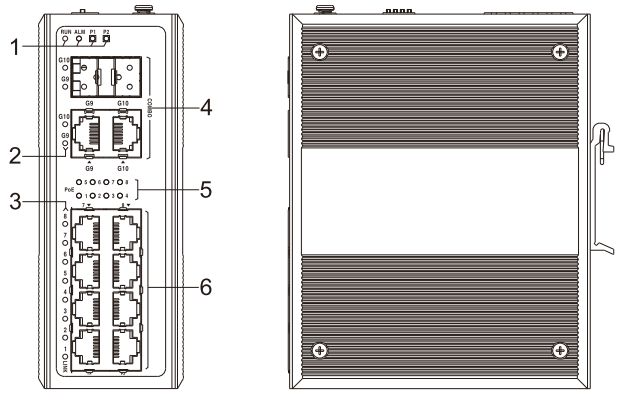
Model I



Model II

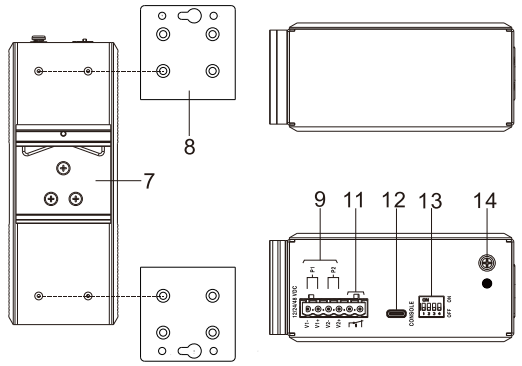


Model III

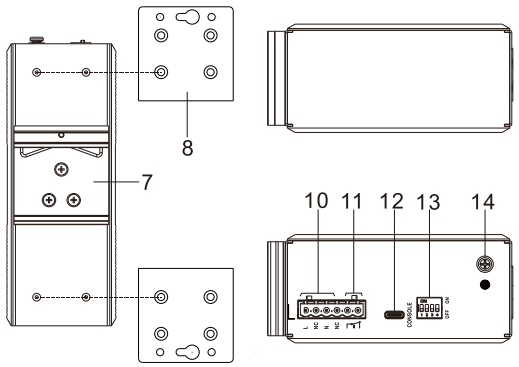


Model IV

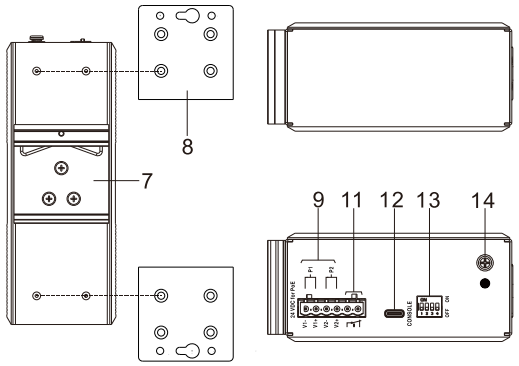
➢ **Rear view, bottom view and top view**



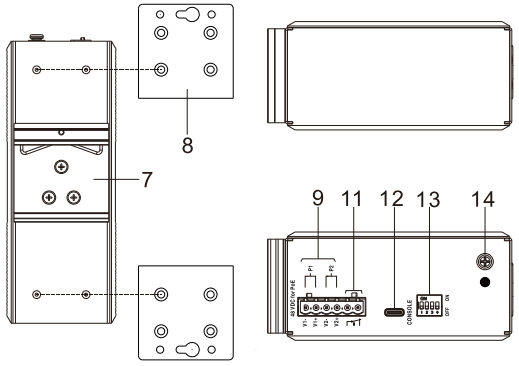
Model I



Model II



Model III



Model IV

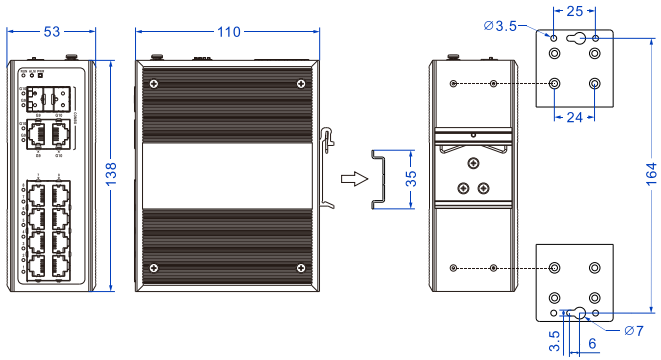
1. System indicators, from left to right in turn they are:
   - Device running state indicator (RUN)
   - Relay alarm status indicator (ALM)
   - Power input status indicator (P1/P2, PWR)
2. Gigabit Combo port indicator (G9-G10)
3. 100M copper port indicator (LINK: 1-8)
4. Gigabit Combo port (G9-G10)
5. PoE indicator (PoE: 1-8)
6. 100M copper ports/100M PoE copper port (1-8)
7. DIN-Rail mounting kit
8. Wall-mounting panel
9. DC dual power input terminal block
10. Input terminal block of single AC power supply
11. Relay alarm output terminal block
12. Console port
13. DIP switch
14. Grounding screw

【Mounting Dimension】

Unit: mm

Note:

- In the figure, the right-side hanging panel are non-factory standard and need additional purchase.
- The external dimensions of this series of products are the same.

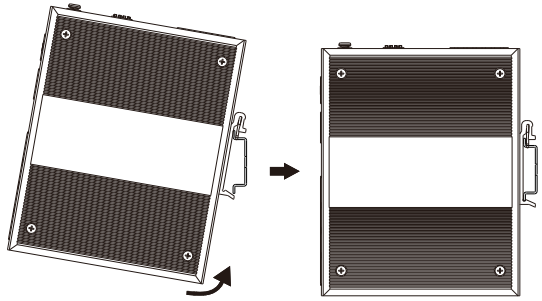


Notice Before Mounting:

- 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.

【DIN-Rail Mounting】

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps are as follows:



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 top, press downward and then insert to the bottom.

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

【Disassembling DIN-Rail】

Step 1 Power off the device.

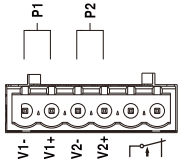
Step 2 After pressing the device downward slightly, first shift out the bottom of DIN-Rail mounting kit, and then shift out the top of DIN-Rail, disassembling ends.

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, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.

【Power Supply Connection】

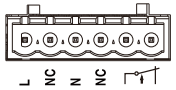
➢ **DC power supply**



Model I, III and IV of this series provide 6-pin 5.08mm pitch input terminal blocks. The power supply occupies the left four positions, providing two independent DC power supply systems, P1 and P2. The terminal blocks are defined as V1-, V1+, V2-, V2+. Power supply supports anti-reverse connection, which cannot power the device but won't damage it when it's reversely connected.

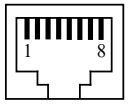
- Model I power input range: 12/24/48VDC (9-60VDC).
- Model III power input range: 24VDC
- Model IV power input range: 48VDC (44~57VDC).

➢ **AC power supply**



This series model II device supports AC single power supply solution, and provides 6-pin 5.08mm pitch input terminal blocks, with the power supply occupying the left four pins. The terminal blocks are defined as: L, N. The power supply supports non-polarity connection, and the device can still work normally after reverse connection. Power supply input range: 220VAC/DC (85~264VAC/DC).

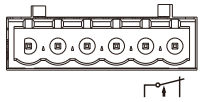
【Connect PoE Power Supply Pin】



PoE ports supply power through the following pins.

PIN	1	2	3	6
Definition	V+	V+	V-	V-

【Relay Connection】



The device supports 1relay alarm signal output. Provide 6-pin 5.08mm pitch terminal blocks, relay occupies the right 2 pins. The relay supports the output of DC power supply alarm or network abnormality alarm. It can be connected to alarm light or alarm buzzer or other switching value collecting devices, which can timely inform operators when the alarm occurs. The default relay status is shown in the figure below.

Device Status	Relay Contacts	Alarm
Not powered on or powered off	Closed	Yes
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

【DIP Switch Settings】

Provide 4 pins DIP switch for function settings, where "ON" is enable valid terminal. The device needs to be powered on again to change the status of DIP switch.

The definitions of DIP switch are as follows:

No.	Definition	Operation
1	Restore Factory Settings	Set the DIP switch to ON, power on the device again, it will restore to factory settings, then turn off the DIP switch.
2	Reserved	-
3	Upgrade	Set the DIP switch to ON, the program of this device can be upgraded, then turn off the DIP switch when this upgrade completes.
4	Reserved	-

【Console Port Connection】



The device provides 1 program debugging port based on Type-C interface which can conduct device CLI command management after connecting to PC.

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

【Checking LED Indicator】

The device provides LED indicators to monitor its operating status, which has simplified the overall troubleshooting process. The function of each LED is described in the table below:

LED	Indicate	Description
P1/P2/PWR	ON	Power is connected and running normally
	OFF	Power supply is disconnected or running abnormally
ALM	ON	Power supply or port link has alarm
	OFF	Power supply, port link without alarm
RUN	ON	The device is powering on or the device is abnormal
	OFF	The device is powered off or the device is abnormal.
	Blinking	Blinking once per second, the device is running normally.
Link/Act (1-8, G9-G10)	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
PoE (1-8)	ON	POE port is powering other

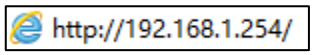
		devices normally
	OFF	POE is disabled or disconnected

【Logging in to WEB Interface】

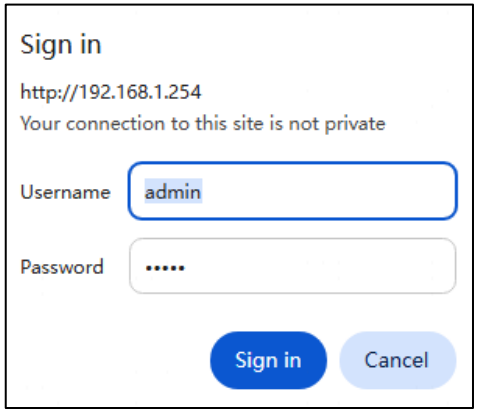
This device supports WEB management and configuration. Computer can access the device via Ethernet interface. The way of logging in to device's configuration interface via IE browser is shown as below:

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.



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 user name and password of the device are "admin".
- 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	
1000M Combo port	10/100/1000Base-T(X) or 1000Base-X
100M copper port	10/100 Base-T(X) RJ45, automatic flow control, full/half duplex mode, MDI/MDI-X autotuning,
100M PoE	10/100 Base-T(X) RJ45, automatic flow control, full/half duplex mode, MDI/MDI-X autotuning, POE port, the output power consumption is 15W or 30W.
PoE pins	Pins 1, 2, 3, and 6 correspond to V+, V+, V-, and V-, respectively.
Console port	CLI command management port, Type-C
Alarm port	6-Pin 5.08mm pitch terminal blocks (relay occupies 2 pins), support 1 relay alarm information output, current loading capacity is 1A@30VDC, 0.3A@125VAC or 6A@250VAC/30VDC
Indicator	Run indicator, interface indicator power indicator, alarm indicator, PoE indicator
Switch Property	
Backplane bandwidth	9.6Gbps
Buffer size	2Mbit
MAC address table	4K
Power Supply	
Model I	2 12/24/48VDC (9~60VDC), 3A overcurrent protection, and support anti-reverse connection
Model II	1 220VAC/DC (85~264VAC/DC), support non-polarity
Model III	2 24VDC, 3A overcurrent protection, support anti-reverse connection
Model IV	2 48VDC (44~57VDC), 3A overcurrent protection, support anti-reverse connection
Access terminal block	6-pin 5.08mm pitch terminal blocks, power supply occupies 4 pins
Power Consumption	
Model I	No-load at normal temperature 25℃: 2.52W@48VDC Full-load at normal temperature 25℃: 4.16W@48VDC No-load at high temperature 75℃: 2.87W@48VDC Full-load at high temperature 75℃: 4.50W@48VDC
Model II	No-load at normal temperature 25℃: 2.30W@220VAC Full-load at normal temperature 25℃: 4.05W@220VAC No-load at high temperature 75℃: 2.53W@220VAC Full-load at high temperature 75℃: 4.30W@220VAC

Model III	No-load at normal temperature 25℃: 3.24W@24VDC Full-load at normal temperature 25℃: 122.5W@24VDC (with PoE load) No-load at high temperature 75℃: 3.56W@24VDC Full-load at high temperature 75℃: 123.5W@24VDC (with PoE load)
Model IV	No-load at normal temperature 25℃: 3.4W@48VDC Full-load at normal temperature 25℃: 225.5W@48VDC (with PoE load) No-load at high temperature 75℃: 3.73W@48VDC Full-load at high temperature 75℃: 228.3W@48VDC (with PoE load)
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.