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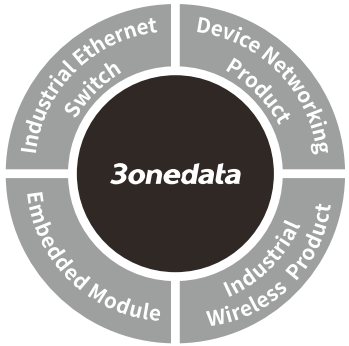
Make network communication more reliable

IES7120 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. Quick installation guide
3. CD
4. DIN-Rail mounting attachment
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】

This series are 20-port 100M/Gigabit managed DIN-Rail industrial Ethernet switches. Models as follows:

Model I. IES7120-4GS-P (12~48VDC)(4 Gigabit SFP fiber ports + 16 100M copper ports + 2 12~48VDC power supplies)

Model II. IES7120-4GS-P (100~240VAC/DC) (4 Gigabit SFP fiber ports + 16 100M copper ports + 1 100~240VAC/DC power supply)

Model III. IES7120-4GS-2F-P (12~48VDC)(4 Gigabit SFP fiber ports + 14 100M copper ports + 2 100M fiber ports + 2 12~48VDC power supplies)

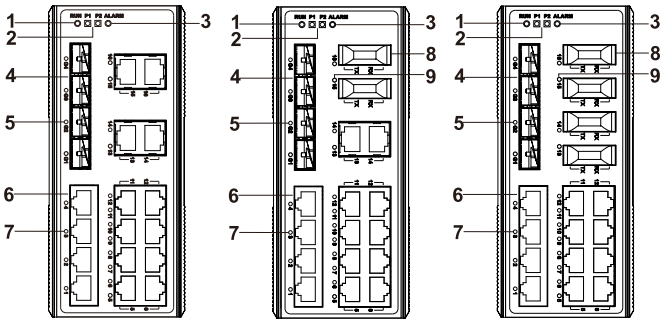
Model IV. IES7120-4GS-2F-P (100~240VAC/DC) (4 Gigabit SFP fiber ports + 14 100M copper ports + 2 100M fiber ports + 1 100~240VAC/DC power supply)

Model V. IES7120-4GS-4F-P (12~48VDC)(4 Gigabit SFP fiber ports + 12 100M copper ports + 4 100M fiber ports + 2 12~48VDC power supplies)

Model VI. IES7120-4GS-4F-P (100~240VAC/DC) (4 Gigabit SFP fiber ports + 12 100M copper ports + 4 100M fiber ports + 1 100~240VAC/DC power supply)

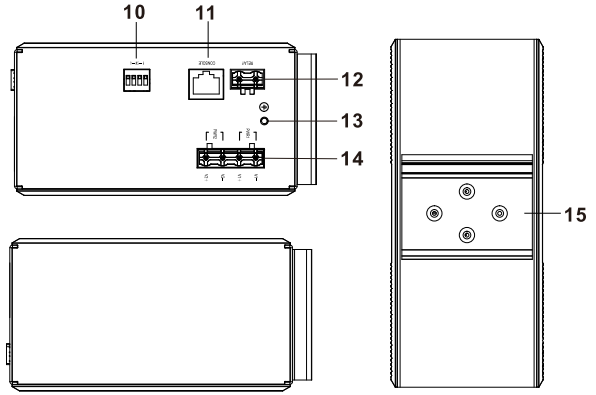
【Panel Design】

➢ **Front View**

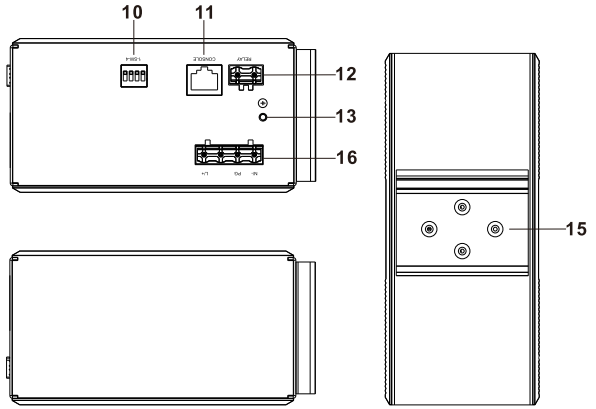


Model I, Model II Model III, Model IV Model V，Model VI

➢ **Top view, bottom view and rear view**



DC Device



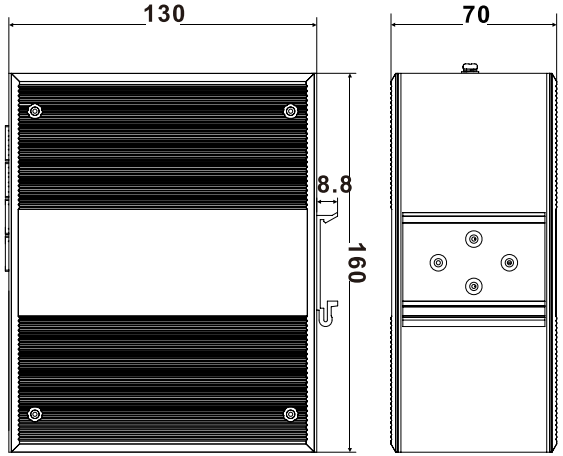
AC Device

1. Device running status indicator RUN
2. Power supply indicator P1/P2
3. Relay alarm status indicator ALARM
4. Gigabit fiber port (SFP slot)
5. Gigabit fiber port indicator
6. 100M copper port
7. 100M copper port indicator
8. 100M fiber port
9. 100M fiber port indicator
10. DIP switch
11. Console port
12. Relay alarm output terminal block (2 pins)
13. Grounding screw (Protective grounding)
14. DC power input terminal block

15. DIN-Rail mounting kit
16. AC power input terminal block

【Mounting Dimension】

Unit: mm

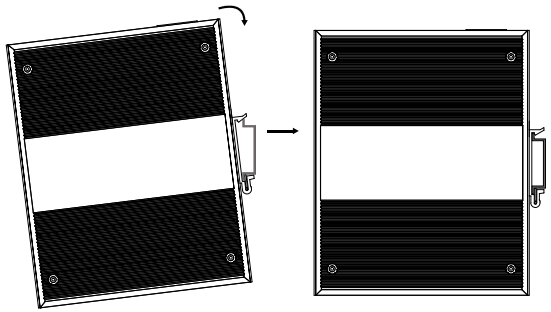


Notice before mounting:

- 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】

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps 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 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, and then shift out the bottom of DIN-Rail, disassembling ends.

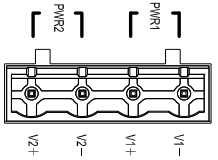
Notice before powering on:

- Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply plug contact 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.

【Power Supply Connection】

➢ **DC power supply**

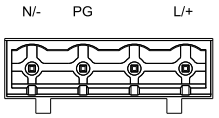
The device provides 4 pins power supply input terminal blocks and supports two independent DC power supply systems, PWR1 and PWR2, which supports non-polarity and



anti-reverse connection function, that the device can work normally after reverse connection.

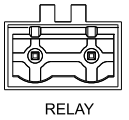
Voltage range: 12~48VDC.

➢ AC power supply



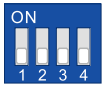
The device provides 4 pins power supply input terminal blocks for AC power supply. Power supply range: 100~ 240VAC/DC.

【Relay Connection】



Relay terminals are a set of normally open contacts of the device alarm relay. They are open circuit in the state of normal non alarm, closed when any alarm information occurs. For example, they are closed when powered off, and send out alarm. The product supports 1 relay alarm information output that can output DC power supply alarm information 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.

【DIP Switch Settings】



Provide 4 pins DIP switch for function settings, where "ON" is enable valid terminal. DIP switches definition as follows:

DIP	Definition	Operation
1	Download	Set the DIP switch to ON, the device downloads, then turn off the DIP switch.
2	Restore factory defaults	Set the DIP switch to ON, the device will root automatically and restore to factory settings, then turn off the DIP switch.
3	System online upgrading	Set the DIP switch to ON, the device can be upgraded automatically, then turn off the

DIP	Definition	Operation
		DIP switch.
4	Reserved	-

【Console Port Connection】

The device provides 1 channel procedure debugging port based on RS232 serial port, and can conduct device CLI command line management after connected to PC. The interface adopts RJ45 port, the RJ45 pin definition as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

【Checking LED Indicator】

The device provides LED indicators to monitor the device working status with a comprehensive simplified troubleshooting; the function of each LED is described in the table as below:

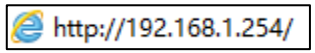
LED	Indicate	Description
P1	ON	PWR2 is connected and running normally
	OFF	PWR2 is disconnected and running abnormally
P2	ON	PWR2 is connected and running normally
	OFF	PWR2 is disconnected and running abnormally
ALARM	ON	Power supply, port link alarm
	OFF	Power supply, port link without alarm
RUN	ON/OFF	The device is running abnormally
	Blinking	Blinking 1 time per second, system is running well.
Link/Act (1-16)	ON	100M port has established valid network connection
	Blinking	100M port is in network active status
	OFF	100M port hasn't established valid network connection
Link/Act (G1-G4)	ON	Gigabit port has established valid network connection
	Blinking	Gigabit port is in an active network status
	OFF	Gigabit port hasn't 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.



Step 3. Enter device's user name 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 is "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	
Gigabit SFP	1000Base- SFP, SFP slot
100M copper port	10/100Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning
100M fiber port	100Base-FX, optional SC/ST/FC
Console port	CLI command management port (RS-232), RJ45
Alarm interface	2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current load capability is 5A@30VDC or 10A@125VAC
Indicator	Power supply indicator, run indicator, interface indicator, alarm indicator
Switch Property	
Backplane bandwidth	12.8G
Packet buffer size	3Mbit
MAC Address Table	8K
Power supply	

Input power supply	Voltage range: 12~48VDC. Support dual power supply redundancy, non-polarity and anti-reverse connection Support built-in 4.0A overcurrent protection
Access terminal block	4 pins 7.62mm pitch terminal blocks
Power Consumption	
Model I	No-load: 5.28W@24VDC Full-load: 11.06W@24VDC
Model III	No-load: 6.29W@24VDC Full-load: 11.40W@24VDC
Model V	No-load: 10.85@24VDC Full-load: 13.42W@24VDC
Working environment	
Working temperature	-40℃～75℃
Storage temperature	-40℃～85℃
Working humidity	5%～95% (no condensation)
Protection grade	IP40 (metal shell)