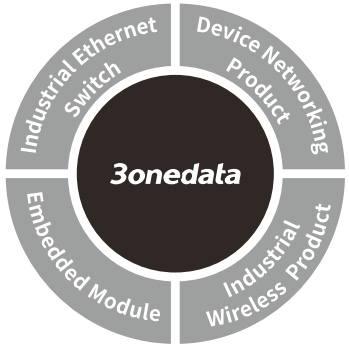
3onedata
Make network communication more reliable

IES6116 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. Certification
3. Quick installation guide
4. Warranty card
5. DIN-Rail mounting attachment
6 CD

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 100M managed DIN-Rail industrial Ethernet switches. Models as follows:

Model I. IES6116-P(12~48VDC) (16 100M copper ports + 2 12～48VDC power supplies）

Model II. IES6116-P(100~240VAC/DC) (16 100M copper ports +1 100～240VAC/DC power supply）

Model III. IES6116-2F-P(12~48VDC) (14 100M copper ports +2 100M fiber ports +2 12～48VDC power supplies）

Model IV. IES6116-2F-P(100~240VAC/DC) (14 100M copper ports +2 100M fiber ports +1 100～240VAC/DC power supply)

Model V. IES6116-4F-P(12~48VDC) (12 100M copper ports +4 100M fiber ports +2 12～48VDC power supplies)

Model VI. IES6116-4F-P(100~240VAC/DC) (12 100M copper ports +4 100M fiber ports +1 100～240VAC/DC power supply)

Model VII. IES6116-6F-P(12~48VDC) (10 100M copper ports +6 100M fiber ports +2 12～48VDC power supplies)

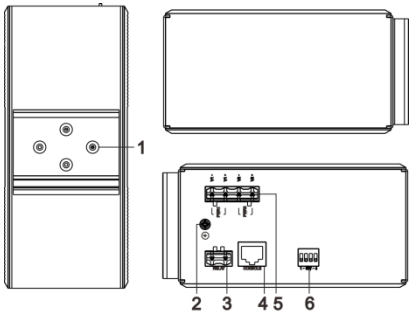
Model VIII. IES6116-6F-P(100~240VAC/DC) (10 100M copper ports +6 100M fiber ports +1 100～240VAC/DC power supply)

Model IX. IES6116-8F-P(12~48VDC) (8 100M copper ports +8 100M fiber ports +2 12～48VDC power supply)

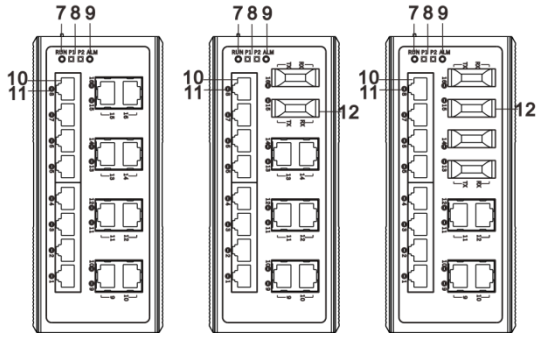
Model X. IES6116-8F-P(100~240VAC/DC) (8 100M copper ports +8 100M fiber ports +1 100～240VAC/DC power supply)

【Panel Design of DC Device】

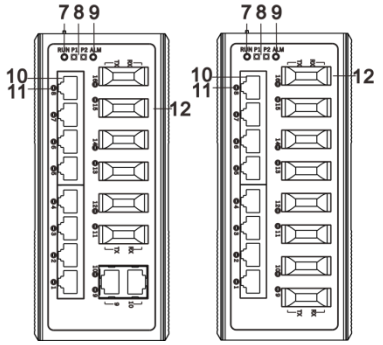
➢ **Top view, Bottom view and Rear view**



➢ **Front view**



Model I Model III Model V

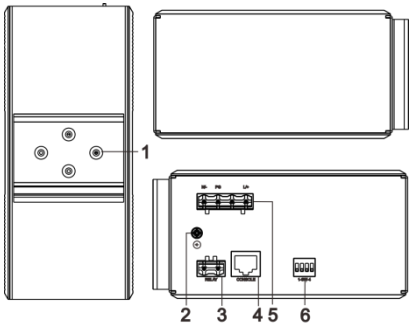


Model VII Model IX

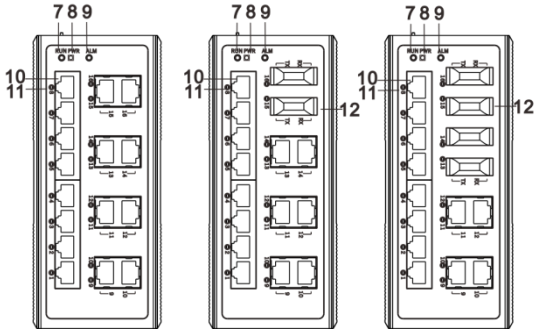
1. DIN-Rail mounting kit
2. Grounding screw
3. Relay alarm output terminal block
4. Console port
5. DC dual power input terminal block
6. DIP switch
7. Device running indicator RUN
8. Power supply input status indicator P1/P2
9. Relay alarm indicator ALM
10. 10/100Base-T(X) Ethernet copper port
11. Ethernet port connection indicator
12. 100Base-FX Ethernet fiber port

【Panel Design of AC Device】

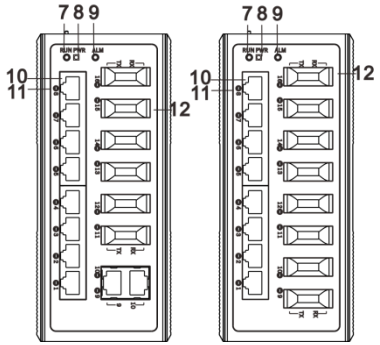
➢ **Top view, Bottom view and Rear view**



➢ **Front view**



Model II Model IV Model VI

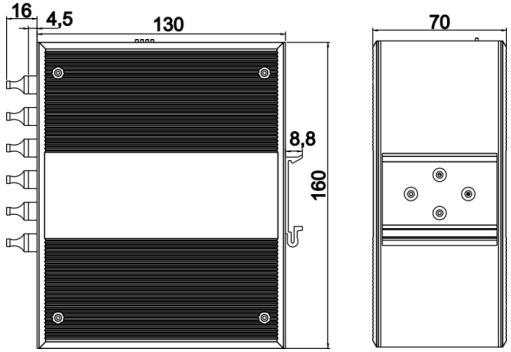


Model VIII Model X

1. DIN-Rail mounting kit
2. Grounding screw
3. Relay alarm output terminal block
4. Console port
5. AC single power input terminal block
6. DIP switch
7. Device running indicator RUN
8. Power supply input status indicator PWR
9. Relay alarm indicator ALM
10. 10/100Base-T(X) Ethernet copper port
11. Ethernet port connection indicator
12. 100Base-FX Ethernet fiber port

【Mounting Dimension】

Unit: mm

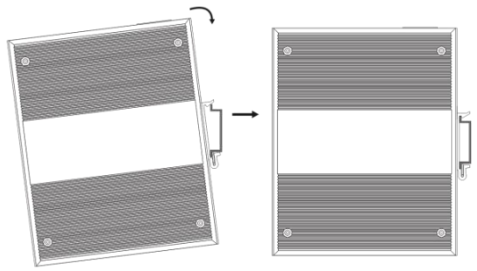


Attention before mounting:

- 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.

【DIN-Rail Mounting】

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



Step 1 Check whether the DIN-Rail mounting kit that comes with the device 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, and then mounting ends.

【Disassembling DIN-Rail】

Step 1 Power off the device.

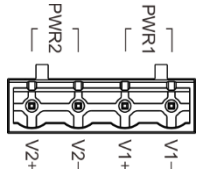
Step 2 After lift the device upward slightly, first shift out the top of DIN-Rail mounting kit, and then shift out the bottom of DIN-Rail, disassembling ends.

Attention before powering on:

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

【Power Supply Connection】

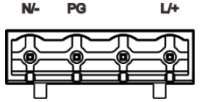
➢ **DC dual power supply**



The products of model I, model III, model V, model VII, model IX support DC dual power supply and provide 4 pins power supply input terminal blocks and two independent DC power supply systems of PWR1 and PWR2.

Power supply range: 12~48VDC

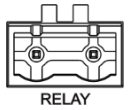
➢ AC single power supply



The products of model II, model IV, model VI, model VIII, model X support AC single power supply and provide 4

pins 7.62mm pitch power input terminal blocks. The definitions of terminal blocks as follows: N/-, PG, L/+.
Power supply range: 100～240VAC/DC.

【Relay Connection】



Relay terminal blocks are a pair of normally open contacts in the alarm relay of the device. They are open circuit in the status of normal no alarm, and closed when any warning message occurs. For example: they are closed and send out alarm when power off. The product supports 1 relay warning message output, and warning messages output of the DC power supply or network abnormal alarm output. It can be connected to alarm indicator, alarm buzzer, or other switching value collecting devices for timely warning operating staffs when the warning message occurs.

【DIP Switch Settings】

The product provides 4 pins DIP switch for function settings, where "ON" is the enable valid terminal. Please power on again before changing the DIP switch status.

DIP switch definitions as follows:

DIP	Definition	Operation
1.	Reserved	-
2.	Restore factory defaults	Set the DIP switch to ON, the device will automatically restore factory defaults, and then turn off the DIP switch.
3.	Upgrade	Set the DIP switch to ON for upgrading the device, and then turn it off.
4.	Reserved	-

【Console Port Connection】

The device provides 1 procedure debugging port based on serial port, and can manage the CLI command line of the device after connected to PC. The interface adopts RJ45 port, the RJ45 pins definition as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

【Checking LED Indicator】

The function of each LED is described in the table as below:

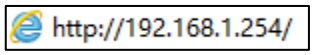
LED	Status	Description
PWR/ P1/P2	ON	Power supply is connected and running normally
	OFF	Power supply is disconnected and running abnormally.
ALM	ON	Power supply and port link alarm
	OFF	Power supply and port link without alarm
RUN	ON	The device is powering on or abnormal.
	OFF	The device is powered off or abnormal.
	Blinking	Blink once per second, the device is running well.
Link/ ACT (1-16)	ON	Ethernet port connection is active.
	Blinking	Data transmitted
	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.



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 "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	
100M copper port	10/100Base-T(X) self-adapting RJ45 port, full/half duplex self-adaption or specified operating mode, support MDI/MDI-X self-adaption
100M fiber port	100Base-FX, optional SC/ST/FC interface

Console port	CLI command management port (RS-232), RJ45
Alarm interface	Support 1 relay alarm information output, the current loading capacity is 1A@24VDC
Indicator	Power indicator, running indicator, interface indicator and alarm indicator
Exchange attributes	
Backplane bandwidth	12.8G
Packet buffer size	3Mbit
MAC table size	8K
Power supply	
Input power supply	12~48VDC or 100~240VAC/VDC DC power supply supports dual power supply redundancy and built-in overcurrent 1.2A protection
Access terminal	4 pins 7.62mm pitch terminal blocks
Consumption	
No-load	≤10.30W@24VDC
Full-load	≤12.50W@24VDC
Environmental Limits	
Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%~95% (no condensation)
Protection grade	IP40 (metal shell)