



# IES6100 Series Managed Industrial Ethernet Switch Quick Installation Guide

## 【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. Power line (AC device standard)
4. Certification
5. Warranty card

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

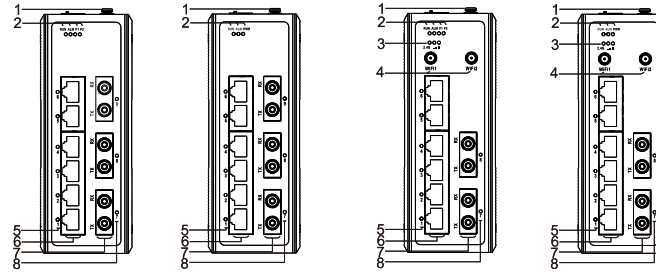
## 【Product Overview】

This series are 100M managed industrial Ethernet WiFi switches. The models include:

- Model I.** IES6100-6T3F-2LV-N (6 100M copper ports + 3 100M 1×9 fiber ports, 2 12/24/48 (9~60VDC) power supplies)
- Model II.** IES6100-6T3F-HV-N (6 100M copper ports + 3 100M 1×9 fiber ports, 1 220VAC/DC (85~264VAC/DC) power supply)
- Model III.** IES6100-6T2F-W2-2LV-N (6 100M copper ports + 2 100M 1×9 fiber port, 2 12/24/48 (9~60VDC) power supplies)
- Model IV.** IES6100-6T2F-W2-HV-N (6 100M copper ports + 2 100M 1×9 fiber port, 1 220VAC/DC (85~264VAC/DC) power supply)

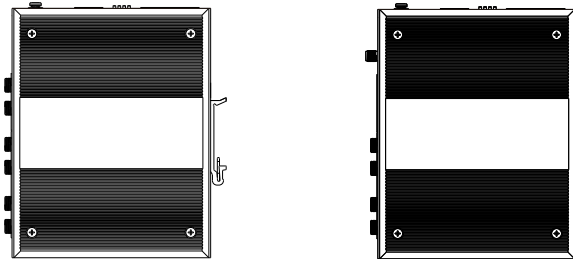
## 【Panel Design】

### ➤ Front View



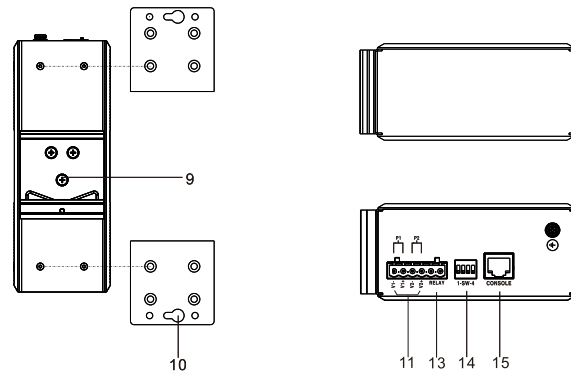
Model I      Model II      Model III      Model IV

### ➤ Bottom view and top view

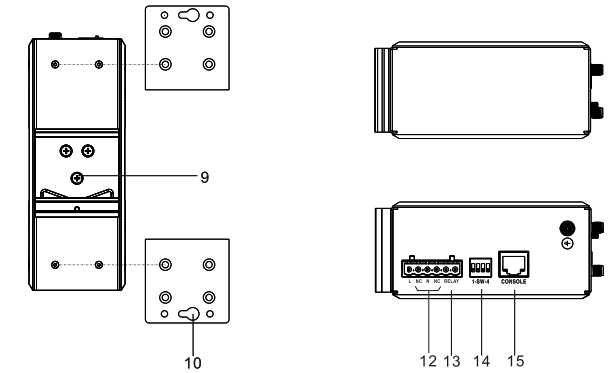


Model I, II      Model III, IV

### ➤ Rear view, Bottom view and Top view



Model I, III



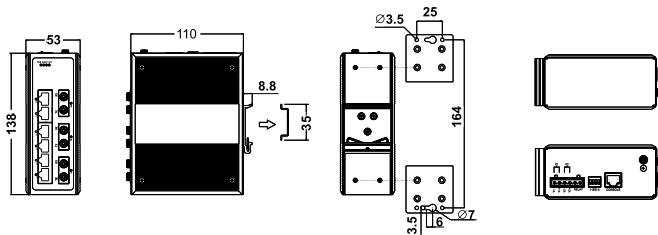
Model II, IV

1. Grounding screw
2. Indicators, from left to right in turn they are:
  - Device running state indicator RUN
  - Relay alarm indicator ALM
  - Power input status indicator P1/P2/PWR
3. WiFi indicator + 2.4G bridge strength indicator
4. WIFI antenna interface
5. 100M Ethernet port connection indicator (1-6)
6. 100M Ethernet port (1-6)
7. 100Base-FX 100M Ethernet fiber port (7-8/9)
8. 100Base-FX 100M Ethernet fiber port indicator (7-8/9)
9. DIN-Rail mounting kit
10. Wall mounting board (optional)
11. DC dual power input terminal block
12. Input terminal block of single AC power supply
13. Relay alarm output terminal block
14. DIP switch
15. Console port

## 【Mounting Dimension】

Unit: mm

Note: All products in this series have the same installation size.

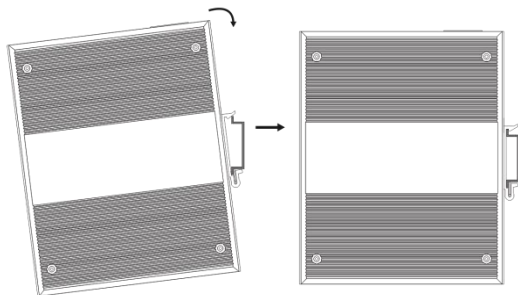


**⚠ Notice Before Mounting:**

- 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】**

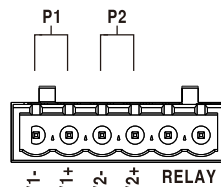
- Step 1** Power off the device.
- Step 2** After lifting the device upward slightly, first shift out the top of DIN-Rail mounting kit, and then shift out the bottom of DIN-Rail, disassembling ends.

**⚠ Notice before power on:**

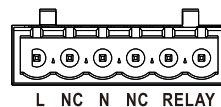
- Power ON operation: First insert the power supply terminal block into the device power supply interface, then plug the power supply plug contact and power on.
- Power OFF operation: First, remove the power plug, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.

**【Power Supply Connection】**

➢ **DC dual power supply**



Model I and III support DC dual power supply and provide 6 pins 5.08mm pitch input terminal blocks, including 4 pins power supply terminal blocks on the left side. Provide two independent DC power supply systems, P1 and P2, which supports nonpolarity and anti-reverse connection function, that the device can work normally after reverse connection.



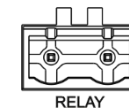
The rated voltage is 12/24/48VDC, and the power supply range is 9~60VDC.

➢ **Single AC power supply**

Model II and IV of this series support AC single power supply

and provide 6 pins 5.08mm pitch power input terminal blocks, of which 4 pins power supply terminal blocks on the left side, which are defined to L, NC, N and NC. The rated voltage is 220VAC/DC, Power supply range: 85~264VAC/DC.

**【Relay Connection】**



Support 1 relay alarm information output, and use 6-pin 5.08mm pitch terminal blocks (relay occupies 2 pins on the right side). 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 relay supports the output of 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. The device needs to be powered on again to change the status of DIP switch.

The definitions of DIP switch are as follows:

DIP	Definition	Operation
1	Reserved	-
2	Restore Factory Settings	Set the DIP switch to ON, the device will root automatically and restore to factory settings, then turn off the DIP switch.
3	Upgrade	Set the DIP switch to ON, the device can be upgraded, then turn off the DIP switch when this upgrade completes.
4	Reserved	-

### 【Console Port Connection】

Provide 1 program debugging port based on RS232 serial port which can conduct device CLI command management after connecting to PC. The interface adopts RJ45 port, the RJ45 pin definition as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

### 【Antenna Connection】

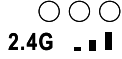
Model III and IV provide 2 WIFI antennas, the antenna specifications are shown below:

Type	P/N	Gain (dBi)	Quantity (pcs)
2.4G wireless	3005040056	5	2

### 【Checking LED Indicator】

Provide 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:

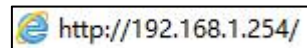
LED	Indicate	Description
PWR/P1/P2	ON	Power is connected and running normally
	OFF	Power supply is disconnected or running abnormally
ALM	ON	Power supply or the port link is alarming.
	OFF	Power supply, port link without alarm
RUN	ON	The device is powering on or the device is abnormal.
	OFF	The device is powered off or the device is abnormal.
	Blinking	Blinking 1 time per second, the device is running normally.
Link/Act (1-8/9)	ON	Ethernet port has established a valid network connection

	Blinking	Ethernet port is in an active network status
	OFF	Ethernet port has not established valid network connection
	The left light 1 is on	The WiFi function of this device is enabled
	The left light 1 is off.	The WiFi function of this device is disabled
	The right light 2 and 3 are off	The device is in AP mode; Or the device is in bridge mode, but the bridging is unsuccessful.
The right light 2 or 3 is on	The device is in bridge mode, and the bridge signal strength is weak	
The right light 2 and 3 are on	The device is in bridge mode, and the bridge signal strength is strong	

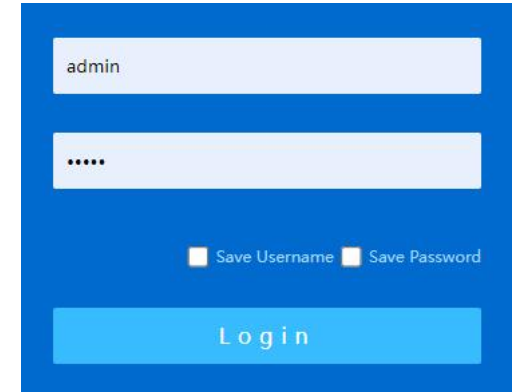
### 【Logging in to WEB Interface】

Support 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	
100M copper port	10/100Base-T(X) self-adapting RJ45 port, half/full duplex self-adaption or forced working mode, support MDI/ MDI-X self-adaption
100M fiber port	100Base-FX, 1×9 interface
Console port	CLI command management port (RS-232), RJ45

Alarm port	6-pin 5.08mm pitch terminal blocks, relay occupies the right 2 pins, support 1 relay alarm information output, current load capability is 1A@24VDC
Antenna interface	2 WIFI antenna interfaces, RPSMA-K(Female)
Indicator	Power supply indicator, run indicator, interface indicator, alarm indicator
<b>Switch Property</b>	
Backplane bandwidth	7.6G
Packet buffer size	1Mbit
MAC Address Table	8K
<b>Power Supply</b>	
DC power supply	12/24/48VDC (9~60VDC), dual power supplies, and support built-in overcurrent protection
AC power supply	220 VAC/DC (85~264 VAC/DC), with built-in overcurrent protection
Access terminal block	6-pin 5.08mm pitch terminal blocks, power supply occupies the left 4 pins
<b>Power Consumption</b>	
No-load	Model III: 7.2W@24VDC
Full-load	Model III: 8.3W@24VDC
<b>Working Environment</b>	
Working temperature	-40~75°C
Storage temperature	-40~85°C
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.