3onedata

IES6100 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.

- Industrial Ethernet switch 1.
- 2. **DIN-Rail mounting attachment**
- 3. Power line (AC device standard)
- Certification 4.
- 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 (6 100M copper ports + 3 100M

1×9 fiber ports, 2 9~60VDC power supplies)

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

[Panel Design]

Front View \triangleright







Model I, III



Model II. IV

Grounding screw 1.

° C) °

0 0

0 ര

© ©

10

⊛⊛

Ð

- 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
- WiFi indicator + 2.4G bridge strength indicator 3.
- 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)
- DC dual power input terminal block 11.





Model I, II

 \geq

Rear view, Bottom view and Top view

Model III, IV

- 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 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 $9 \sim 60$ VAC/VDC.

> 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. 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	Set the DIP switch to ON, the
	Settings	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:

Туре	P/N	Gain (dBi)	Quantity (pcs)
2.4G	0005040050	_	0
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
	ON	Power supply or the port
		link is alarming.
ALIVI	OFF	Power supply, port link
		without alarm
	ON	The device is powering on
		or the device is abnormal.
	OFF	The device is powered off
RUN		or the device is abnormal.
		Blinking 1 time per
	Blinking	second, the device is
		running normally.
	ON	Ethernet port has
Link/Act		established a valid
(1-8/9)		network connection
	Blinking	Ethernet port is in an

		active network status	
		Ethernet port has not	
	OFF	established valid network	
		connection	
	The left light 1	The WiFi function of this	
	is on	device is enabled	
	The left light 1	The WiFi function of this	
	is off.	device is disabled	
		The device is in AP mode;	
	The right light	Or the device is in bridge	
246 -	2 and 3 are off	mode, but the bridging is	
2.40		unsuccessful.	
	The right light	The device is in bridge	
		mode, and the bridge	
	2 or 3 is on	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.

ể http://192.168.1.254/

Step 3 Enter device's username and password in the login

window as shown below.

admin	
	📃 Save Username 📃 Save Password
	Login

Step 4 Click "OK" button to login to the WEB interface of the device.



- 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
Switch Property	
Backplane bandwidth	7.6G
Packet buffer size	1Mbit
MAC Address Table	8K
Power Supply	
DC power supply	The rated voltage is
	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
Power Consumption	
No-load	Model III: 7.2W@24VDC
Full-load	Model III: 8.3W@24VDC
Working Environment	
Working temperature	-40~75°C
Storage temperature	-40~85°C
Working humidity	
working number	5% \sim 95% (no condensation)



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.

【Disposal of Waste Electrical and Electronic Equipment (WEEE 2012/19/EU)】