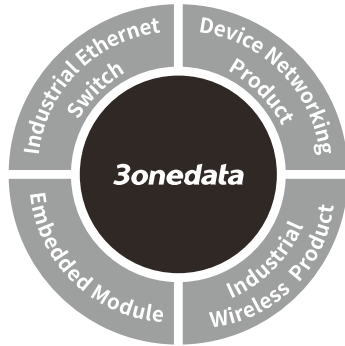


# IES3000 Series Industrial Managed Bypass Ethernet Switch Quick Installation Guide



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## 【Package Checklist】

Please check whether the package and accessories are intact while using the switch for the first time

- |                    |                             |
|--------------------|-----------------------------|
| 1. Switch          | 2. Quick installation guide |
| 3. Installation CD | 4. Rackmount attachment     |
| 5. Certification   | 6. Warranty card            |
| 7. Power cord      |                             |

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

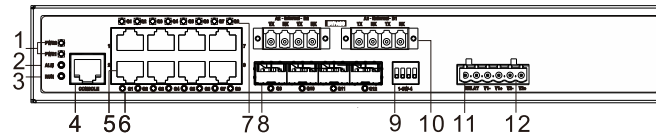
## 【Product Overview】

This product is industrial rack-mounted full gigabit managed Bypass Ethernet switch. The models are:

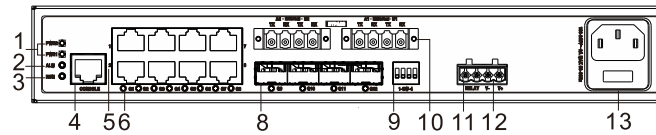
- Model I IES3000-8GP4GS-2BP-2P48-240W (8 Gigabit PoE copper ports + 4 Gigabit SFP + 2 Bypass + 2 48VDC power supplies + 240W power consumption)
- Model II IES3000-8GT4GS-2BP-P48P220 (8 Gigabit copper ports + 4 Gigabit SFP + 2 Bypass + 1 48VDC power supply + 1 220VAC power supply)
- Model III IES3000-8GT4GS-2BP-2P48 (8 Gigabit copper ports + 4 Gigabit SFP + 2 Bypass + 2 48VDC power supplies)
- Model IV IES3000-8GT4GS-2BP-2P220 (8 Gigabit copper ports + 4 Gigabit SFP + 2 Bypass + 2 220VAC power supplies)

## 【Panel Design】

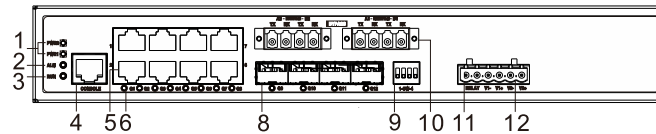
### ➤ Front view



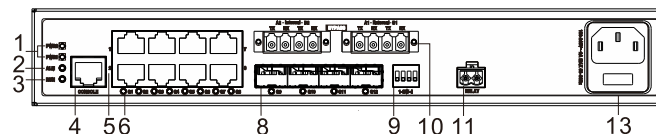
Model I



Model II

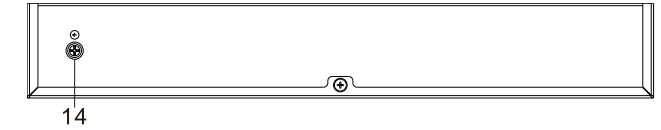


Model III



Model IV

### ➤ Rear view



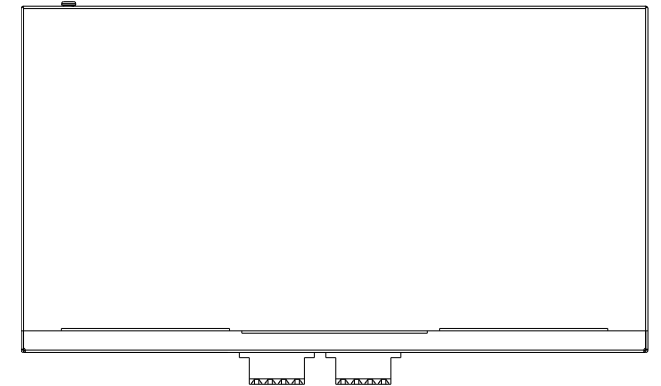
➤ Left view



➤ Right view



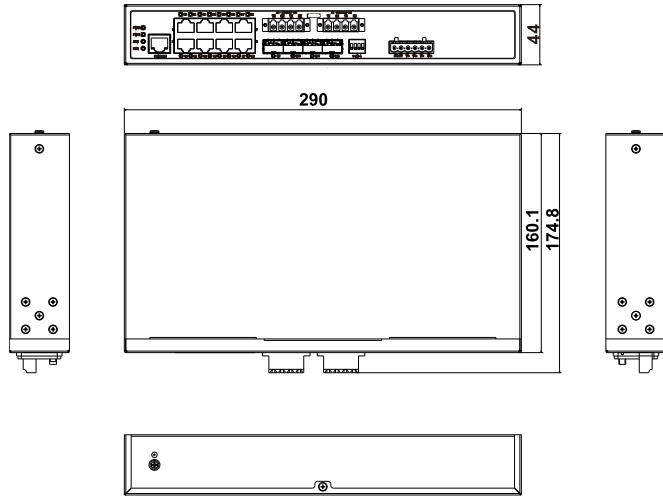
➤ Top view



1. Power supply indicator
2. Alarm indicator
3. Running indicator
4. CONSOLE port
5. Gigabit copper port
6. Port indicator
7. PoE indicator
8. Gigabit SFP slot
9. DIP switch
10. Flange interface
11. Relay input terminal
12. DC power supply
13. AC power supply

## 【Mounting Dimension】

Unit: mm

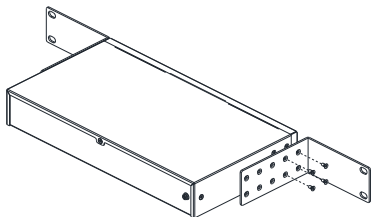


**Attention before mounting:**

- 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.

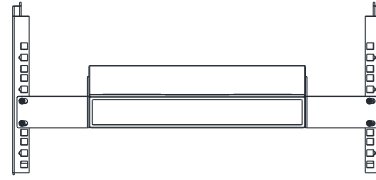
**【Mounting the Device】**

- Step 1 Select the device mounting location to ensure enough size.
- Step 2 Use 4 screws to mount the mounting lugs to the device as shown below.



Step 3 Place the device on the rack surface plate; adopt 4

screws to mount the right and left mounting lugs on the rack.



Step 4 Check and confirm that the product is mounted firmly on the rack, mounting ends

**【Dismounting the Device】**

- Step 1 Device powers off.
- Step 2 Unscrew the fixed mounting lug screw on the rack.
- Step 3 Remove the device from rack, disassembling ends.



**Note before power on:**

- Power ON operation: first connect power line to the connection terminal of device power supply, then power on.
- The “—” of AC power supply switch means power-on state; and “O” means power-off state.
- Power OFF operation: first unpin the power plug, then remove the power line, please note the operation order above.

**【Power Supply Connection】**

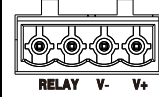

➤ **2 AC power supplies**



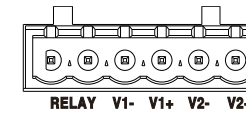
The Model IV of this series provides 2 AC power supplies, two power supply systems inside the device, one outlet outside. When one power supply fails, it can switch to another one automatically and immediately to ensure device's normal power supply. Power supply input: 220VAC (100~240VAC)

➤ **1 DC power supply + 1 AC power supply**

The Model II of this series provides 1 DC power supply and 1 AC power supply:

Power supply type	Power supply Schematic	Power supply range
DC		48VDC (12~48VDC)
AC		220VAC(100~240VAC)

➤ **2 DC power supplies**



The Model I and Model III of this series provide 1 6-pin 5.08mm pitch input DC terminal. The power supply occupies 4 pins and provides 2 independent power supply systems, PWR1 and PWR2. When one power supply fails, it can switch to another one automatically and immediately to ensure device's normal power supply. Power supply input of Model I: 48VDC, power supply range of Model III: 48VDC (12~48VDC).

**【Relay Connection】**

Relay terminal is a set of normally open contacts of device's alarm relay. It is in open circuit status when it has no alarm, close circuit when it has any alarm. For example: when powered off, it's in close circuit and sending out alarm. This switch supports 1 relay alarm information output, output power supply alarm or network anomaly alarm. It can attach external warning light, alarm buzzer or other switch states acquisition device to warn operators in time when there has an alarm.

**【Flange Interface Connection】**

This device provides Bypass function. As shown below, A2 and B2 ends that on the left side represent internal terminal blocks of flange interface, A1 and B1 ends that on the right side of dotted line represent external terminal blocks of flange interface.

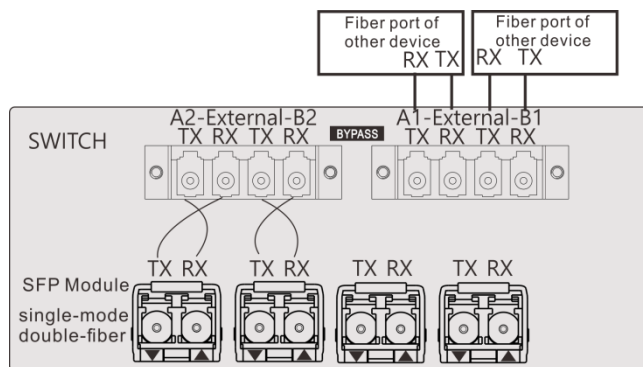
Status	Description
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Status	Description
	When powered on, TX, RX at A2 end connect to RX, TX at A1 side separately, TX, RX at B2 end connect to RX, TX at B1 side separately.
	When powered off, TX, RX at A1 side connects to RX, TX at B1 side

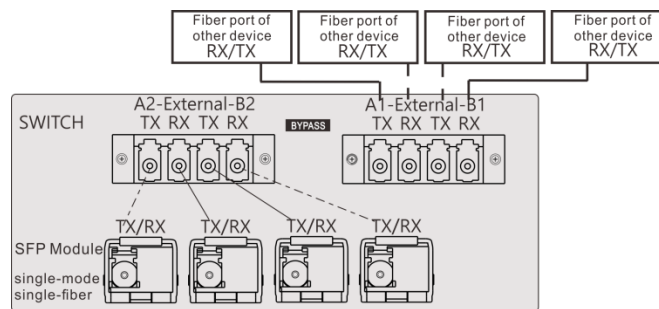
### ➤ Bypass function

According to the specification of SFP optical module, the usage of fiber port Bypass is as follows:

- When SFP optical module is single-mode double-fiber, 1 set of Bypass function is supported. Connection method is shown below.



- When SFP optical module is single-mode single-fiber, 2 sets of Bypass function are supported. The solid line and dotted line each presents 1 set of Bypass connection method as shown below:



When the switch is normally powered on and operating, it can communicate with other devices normally. When it's powered off, fiber port A and B can connect to each other without interfering other devices' normal communication.

### 【DIP Switch Setting】



This device provides 4-bit DIP switch for function setting. "ON" is enable valid port. Please power off and power on after changing the status of DIP switch.

The definitions of DIP switches are as follows:

- 1.restore factory setting
- 2.reserved
- 3.reserved
- 4.reserved

### 【Console Port Connection】

This device provides an application debugging port based on RS232 serial port which could connect to PC for device's CLI command management. It adopts RJ45 port, and its pin definitions are as follows:

Pin	2	3	5
Definition	TXD	RXD	GND

### 【Checking LED Indicator】

The device provides LED indicators to monitor device's operation status and comprehensively simplify troubleshooting process. The detailed status of each LED is described in the table as below:

LED	Status	Description
PWR1	ON	Power supply P1 is connected normally
	OFF	Power supply P1 is

		disconnected or running abnormally
PWR2	ON	Power supply P2 is connected normally
	OFF	Power supply P2 is disconnected or running abnormally
ALM	ON	Power supply or port link is giving an alarm
	OFF	Power supply or port link isn't giving any alarm
RUN	ON	Device is powered on or running abnormally
	OFF	Device is powered off or running abnormally
	Blinking	Blinking 1 time/s, device operates normally
Link/Act (1~12)	ON	Ethernet port has established an active network connection
	Blinking	Ethernet port is in an active network state
	OFF	Ethernet port hasn't established an active network connection
PoE (G1-G12) (only for PoE product)	ON	PoE port is powering other devices normally
	OFF	PoE port is not powering other devices or disconnected

### 【Specification】

Panel	
Gigabit SFP	1000Base-SFP, SFP slot
Gigabit copper port	10/100/1000Base-T(X) self-adaptive RJ45 port, full/half self-adaption, MDI/MDI-X self-adaption

PoE (Only for PoE product)	The maximum power of PoE port: 30W PoE power supply pin: V+, V+, V- and V- correspond to Pin 1, 2, 3 and 6
Flange interface	2*4LC-LC, single mode fiber, support Bypass
Console port	CLI command management port(RS-232), RJ45
Alarm port	2-pin 5.08mm pitch terminal blocks or 4-pin 5.08mm pitch terminal blocks, support 1 relay alarm output, current carrying capacity is 0.3A/125VAC or 1A/30VDC
Indicator	Running indicator, port indicator, power supply indicator, alarm indicator
<b>Switch property</b>	
Backplane bandwidth	24G
Packet buffer size	4Mbit
MAC address	8K
<b>Power supply</b>	
Input power supply	<ul style="list-style-type: none"> <li>• AC power supply product: 220VAC(100~240VAC)</li> <li>• DC power supply product: 48VDC(12~48VDC);</li> <li>• PoE product: 48VDC</li> </ul>
<b>Power consumption</b>	
Model IV	No-load: 5.9W @220VAC Full-load: 11.6W @220VAC
<b>Operating environment</b>	
Operating temperature	-40~75℃
Storage temperature	-40~85℃
Operating humidity	5%~95% (no condensation)
Protection grade	IP40 (mental shell)