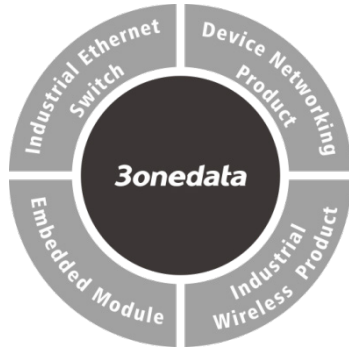


IES2100SL Series Unmanaged Industrial Ethernet Switch Quick Installation Guide



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.

1. Industrial Ethernet switch
2. DIN-Rail mounting attachment
3. Certification
4. Warranty card

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

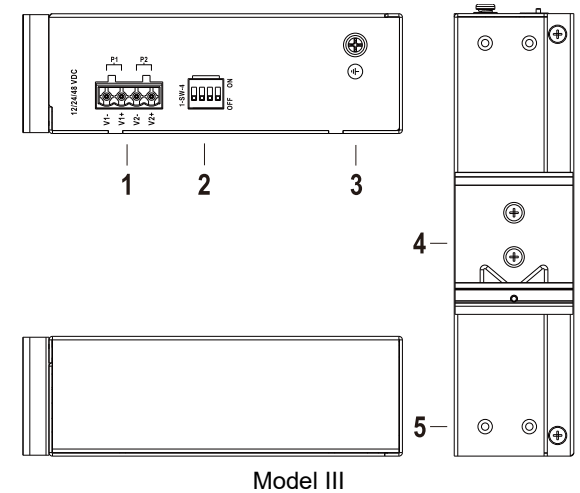
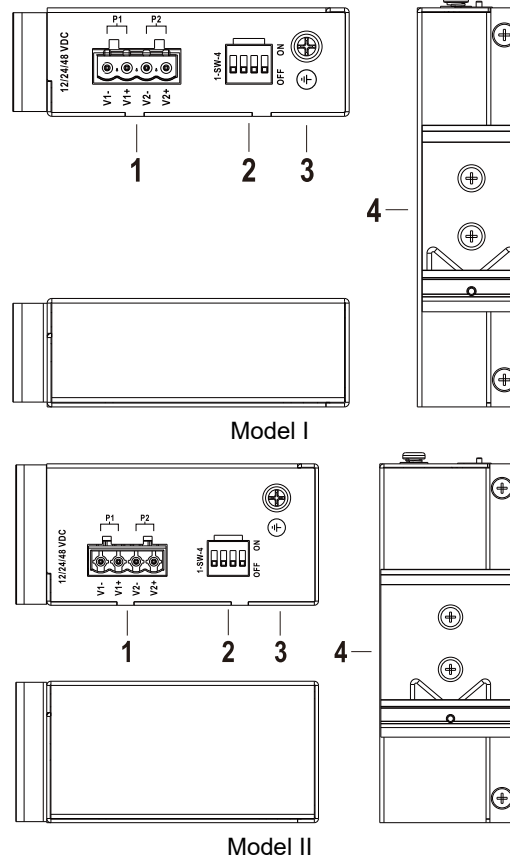
【Product Overview】

This series are 100M unmanaged DIN-Rail industrial Ethernet switches. For convenience, the products of this series adopt the following number on the left in this guide, please confirm the number of your product:

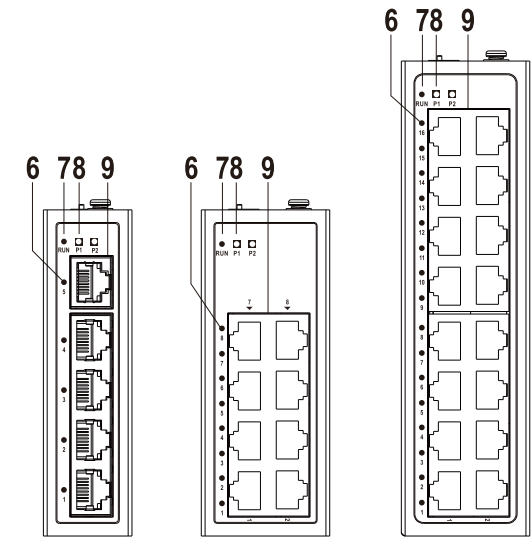
- Model I. IES2100SL-5T-2LV (5 100M copper ports, 12/24/48VDC redundant power supply input)
 Model II. IES2100SL-8T-2LV (8 100M copper ports, 12/24/48VDC redundant power supply input)
 Model III. IES2100SL-16T-2LV (16 100M copper ports, 12/24/48VDC redundant power supply input)

【Panel Design】

➤ Top view, bottom view and rear view



➤ Front view



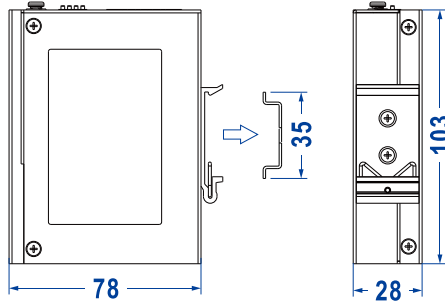
- Model I Model II Model III
1. Terminal blocks for power input (P1-P2)
 2. DIP switch
 3. Grounding screw (M4)
 4. DIN-Rail mounting kit
 5. Location hole for wall-mounting panel
 6. Ethernet port indicator (1-5/8/16)
 7. Running indicator (RUN)
 8. Power supply indicator (P1-P2)

9. 10/100Base-T(X) 100M copper port (1-5/8/16)

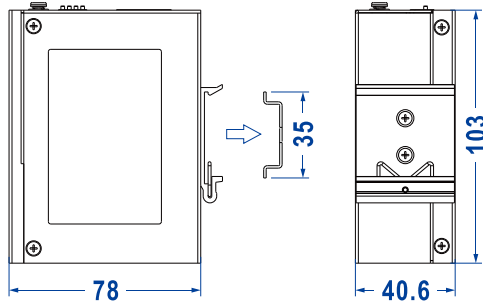
【Mounting Dimension】

Unit: mm

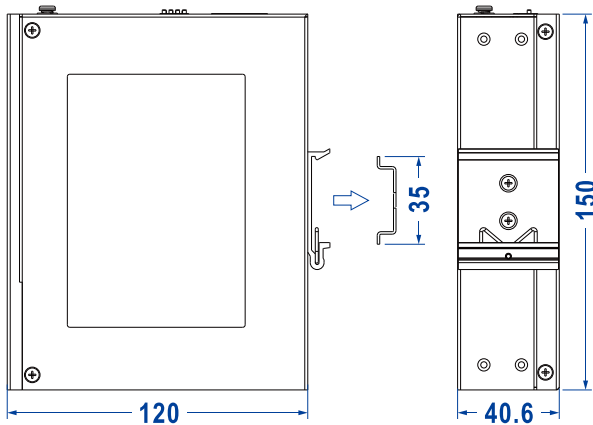
➤ **Model I**



➤ **Model II**



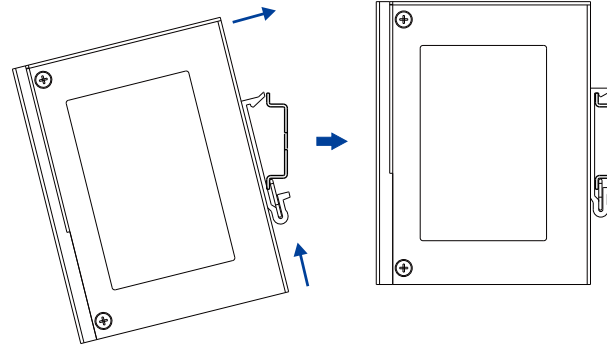
➤ **Model III**



- 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

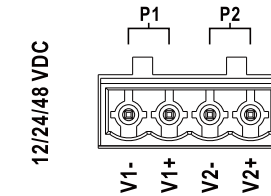
the bottom of DIN-Rail, disassembling ends.



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】



Provide 2 power inputs, and adopt 4-pin 5.08mm pitch terminal blocks. The power input supports 1 power supply alone or 2 power supply at the same time; When two power supplies input at the same time, it

supports redundant backup of power supply. If one power supply fails, the device can still work normally without interruption. Power supply supports anti-reverse connection, which cannot power the device but won't damage it when it's reversely connected. The definitions of power pin are shown in the figure above, and the power input range is 12/24/48 VDC (49~60VDC).

【DIP Switch Settings】

Provide 4 pins DIP switch for function settings, where "ON" is enable valid terminal. The definitions of DIP switch are as follows:

➤ **Model I**

DIP Switch	Definition	Operation
1	Loop Detection	Set the switch to ON to enable port loop detection function. When the loop is detected, the communication of one port will be blocked to avoid the storm, and the indicator of the loop port will flash to warn.



Notice Before Mounting:

DIP Switch	Definition	Operation
2	Storm Suppression	Set the switch to ON to enable storm suppression function
3	VLAN	Set the DIP switch to ON, Port 1 is uplink port, Port 2-5 are the downlink ports, and the downlink ports are isolated from each other.
4	Flow Control	Set the switch to ON to enable flow control function

➤ **Model II**

DIP Switch	Definition	Operation
1	Loop Detection	Set the switch to ON to enable port loop detection function. When the loop is detected, the communication of one port will be blocked to avoid the storm, and the indicator of the loop port will flash to warn.
2	Storm Suppression	Set the switch to ON to enable storm suppression function
3	VLAN	Set the DIP switch to ON, Port 1 is uplink port, Port 2-8 are the downlink ports, and the downlink ports are isolated from each other.
4	Flow Control	Set the switch to ON to enable flow control function

➤ **Model III**

DIP Switch	Definition	Operation
1	Flow control	Set the switch to ON to enable flow control function
2	Storm Suppression	Set the switch to ON to enable storm suppression function
3-4	NC	Reserved



Notice:

The functions corresponding to the 4 DIP switches cannot be used at the same time. You can select one of them to set the function.

【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
P1-P2	ON	Power supply is running normally
	OFF	Power supply is disconnected or running abnormally
RUN	ON	The device is powering on or the device is abnormal.
	Blinking	The device is running normally
	OFF	The device is powered off or the device is abnormal.
1-5/8/16	ON	Ethernet port has established a valid network connection
	Blinking	Ethernet port is in an active network status Note: If loop detection is enabled and the port is looped, the loop port indicator would flash at a frequency of 1Hz for warning.
	OFF	Ethernet port has not established a valid network connection.

【Specification】

Panel	
100M copper port	10/100Base-T(X) self-adaptive RJ45, full/half duplex mode self-adaption, MDI/MDI-X autotunning
Indicator	Power indicator, running indicator, interface indicator
Switch Property	
Model I	MAC address table: 2K Backplane bandwidth: 1G

Model II	MAC address table: 2K Backplane bandwidth: 1.6G
Model III	MAC address table: 8K Backplane bandwidth: 3.2G
Power Supply	
Input power supply	12/24/48 VDC(9~60VDC), dual power supply redundancy, support anti-reverse connection
Access terminal block	4-pin 5.08mm pitch terminal blocks
Power Consumption	
Model I	No-load: 0.2W@12VDC Full-load: 0.8W@12VDC
Model II	No-load: 0.4W@12VDC Full-load: 3.0W@12VDC
Model III	No-load: 0.7W@48VDC Full-load: 2.9W@48VDC
Working Environment	
Working temperature	-40~75°C
Storage temperature	-40~85°C
Working humidity	5%~95% (no condensation)
Protection grade	IP40 (metal shell)