3onedata
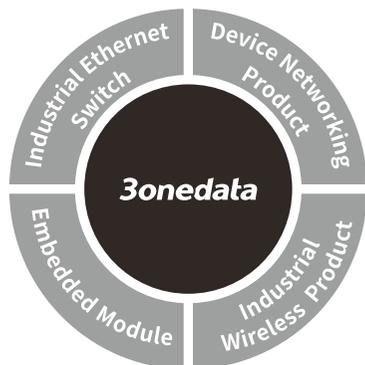Make network communication more reliable

IES318 Series
Unmanaged 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

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 plug-and-play unmanaged industrial Ethernet switches. Models as follows:
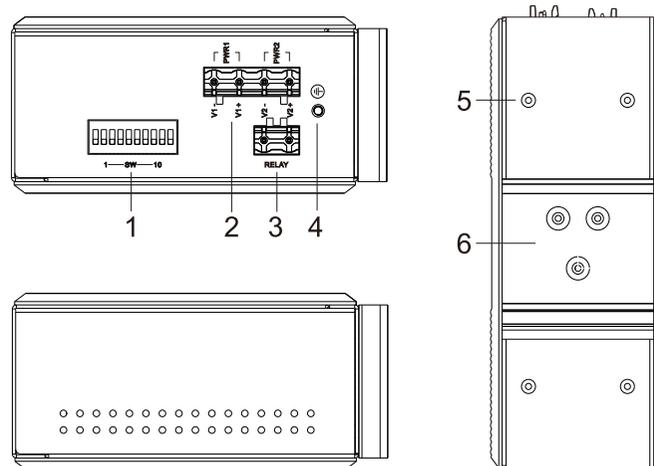
Model I.   IES318 (8 100M copper ports)

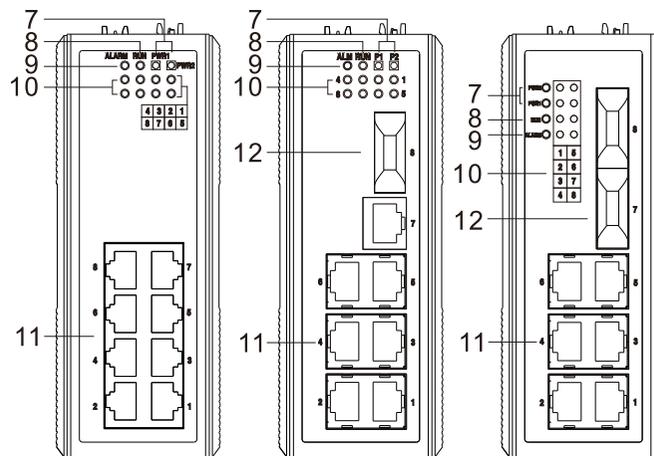Model II.   IES318-1F (7 100M copper ports + 1 100M fiber port)

Model III. IES318-2F (6 100M copper ports + 2 100M fiber ports)

【Panel Design】

➤ **Top view, Bottom view and Rear view**

➤ **Front view**

Model I   Model II   Model III

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

【Mounting Dimension】

Unit: mm
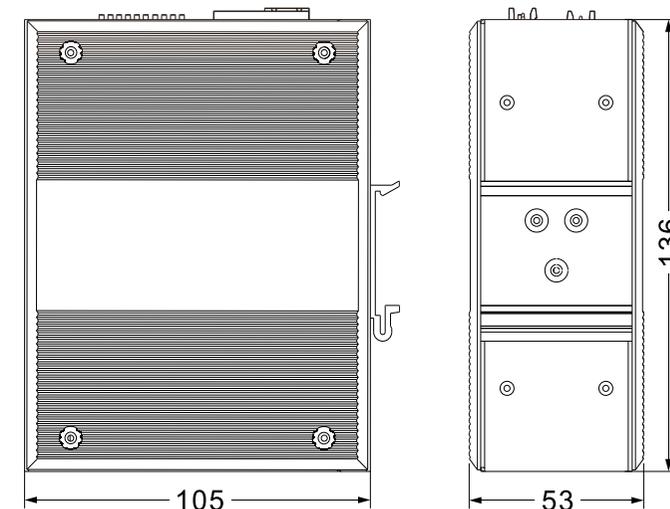
⚠ **Attention before mounting:**

- 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:
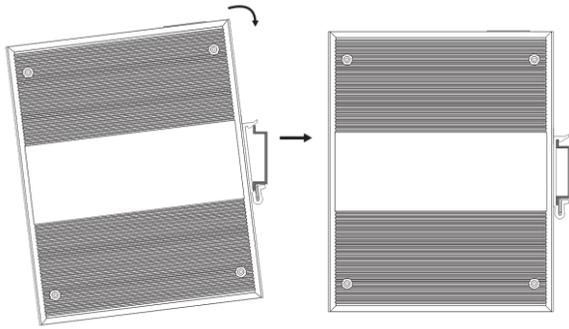
Step 1 Check whether the DIN-Rail mounting kit that comes with the device is installed firmly.

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 power supply**

This series provide redundant power input function and 2 input terminal blocks of PWR1 and PWR2, which can be used
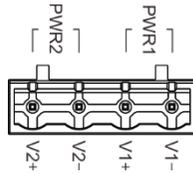
separately or connected to 2 independent DC power supply systems. The device can be simultaneously connected to two power supply systems via two terminal blocks, and it can run normally without interruption when one of the power supply systems fails, improving the reliability of network operation.

Power supply range: 24VDC (12~48VDC).

【Relay Connection】
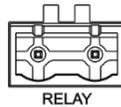
 The access terminal blocks of relay locate on the top panel of the device. The terminal blocks are a pair of normally open contacts in the alarm relay of the device. They are closed circuit in the status of normal no alarm, and open circuit when any warning message occurs. IES318 series support 1 relay warning message output (this series only support power down alarm of the port link and warning message output of customizable power supply). 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】

 This series provide 10 pins DIP switch for function settings, where "ON" is the enable valid terminal.

DIP switch definitions as follows:

DIP	Definition	Operation
1~8	Enabled alarm settings switch of the corresponding port	Set the switch to ON for enabling the alarm
9	The alarm settings of the second power supply	ON represents the status of alarm
10	The alarm settings of the first power supply	ON represents the status of alarm

【Checking LED Indicator】

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

LED	Status	Description
PWR1	ON	PWR1 is connected and running normally
	OFF	PWR1 is disconnected and running abnormally.
P2	ON	PWR2 is connected and running normally
	OFF	PWR2 is disconnected and running abnormally
ALARM	ON	Power supply and port link alarm
	OFF	Power supply and port link without alarm
RUN	Blinking	Blink once per second, the device is running well.
	OFF	The device is running abnormally.
LINK/ACT (1-8)	ON	Ethernet port connection is active.
	OFF	Ethernet port connection is inactive.
	Blinking	Data transmitted

【Specification】

Panel	
100M fiber port	100Base-FX, optional SC/ST/FC interface
100M copper port	10 Base-T/100Base-TX, RJ45, automatic flow control, full/half duplex mode and MDI/MDI-X autotunning
Alarm interface	2 pins 7.62mm pitch terminal blocks, support 1 relay alarm output, and the current loading capacity is 1A@24VDC or 0.5A@120VAC.
Indicator	Power indicator, running indicator, interface indicator and alarm indicator
Exchange attributes	
Backplane bandwidth	1.6G
Packet buffer size	1Mbit
MAC table size	2K

Power supply	
Input power supply	12~48VDC, dual power supply redundancy, nonpolarity and anti-reverse connection
Access terminal	4 pins 7.62mm pitch terminal blocks
Consumption	
IES318	No-load: 1.5W@24VDC Full-load: 2.2W@24VDC
IES318-1F	No-load: 1.7W@24VDC Full-load: 3.2W@24VDC
IES318-2F	No-load: 3.6W@24VDC Full-load: 4.3W@24VDC
Environmental Limits	
Working temperature	-40℃~75℃
Storage temperature	-40℃~85℃
Working humidity	5%~95% (no condensation)
Protection grade	IP30 (metal shell)