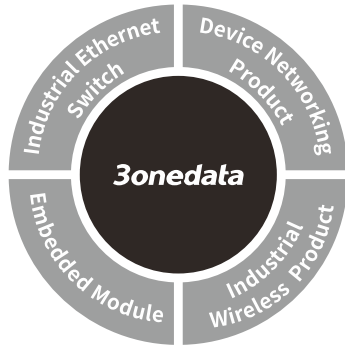


IES615-2D Series Managed Industrial Ethernet Switch Quick Installation Guide



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 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 | 6. CD |

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

【Product Overview】

The series products are managed industrial Ethernet switch. Models as follows:

Model I. IES615-2D (RS-232) (5 100M Copper Ports + 2 RS-232 Serial Ports)

Model II. IES615-1F-2D(RS-232) (1 100M Fiber Port + 4 100M Copper Ports + 2 RS-232 Serial Ports)

Model III. IES615-2F-2D (RS-232) (2 100M Fiber Ports + 3 100M Copper Ports + 2 RS-232 Serial Ports)

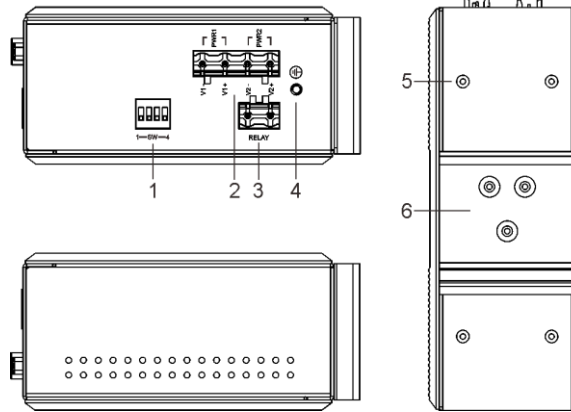
Model IV. IES615-2DI (RS-485) (5 100M Copper Ports +2 RS-485/422 Serial Ports with Isolation)

Model V. IES615-1F-2DI (RS-485) (1 100M Fiber Port +4 100M Copper Ports +2 RS-485/422 Serial Ports with Isolation)

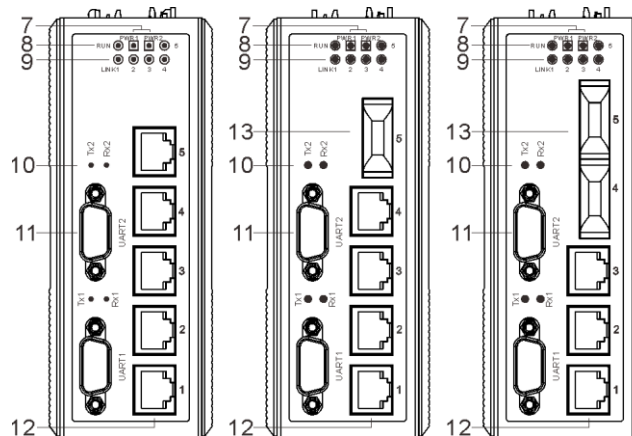
Model VI. IES615-2F-2DI (RS-485) (2 100M Fiber Ports +3 100M Copper Ports + 2 RS-485/422 Serial Ports with Isolation)

【Panel Design】

➤ Top view, Bottom view and Rear view,



➤ Front view



Model I

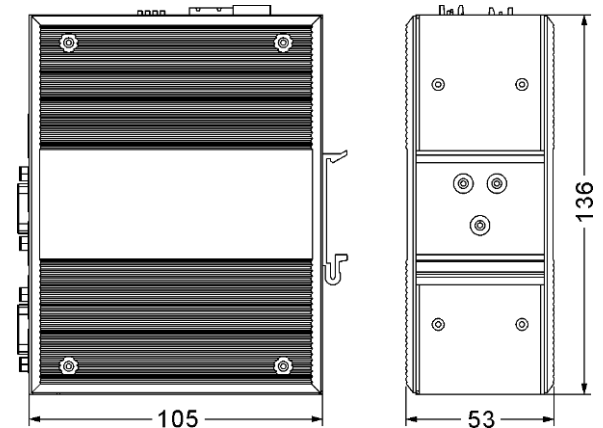
Model II

Model III

1. DIP switch
2. Power input terminal block
3. Relay alarm output terminal block
4. Grounding screw
5. Location hole for wall mounting
6. DIN-Rail mounting kit
7. Power supply input status indicator PWR1/PWR2
8. Device running indicator RUN
9. Ethernet port status indicator
10. Serial port data receiving and sending indicator
11. RS-232 serial port
12. 10/100Base-T(X) 100M Ethernet copper port
13. 100Base-FX 100M Ethernet fiber port
14. RS-485/422 serial port

【Mounting Dimension】

Unit: mm



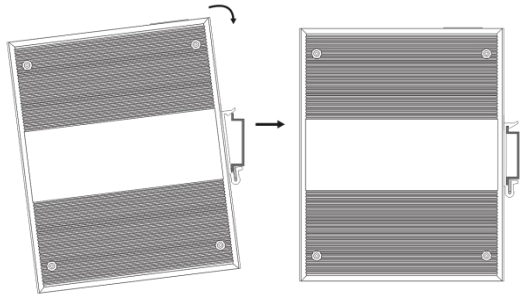
Attention before mounting:

- 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.

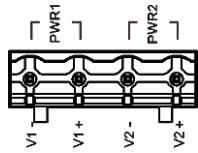


Attention before powering on:

- 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】

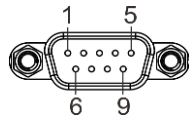
➤ DC power supply



The product provides 4 pins power supply input terminal blocks and two independent DC power supply systems of PWR1 and PWR2. The power supply supports nonpolarity and anti-reverse connection. It can normally operate after reverse connection. Power supply range: 12~48VDC

【Serial Port Connection】

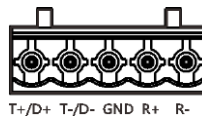
➤ RS-232 serial port



The RS-232 serial port of this series device adopts DB9 male connector, and supports serial server function. The pin definition as shown in the follow table:

PIN	1	2	3	4	5
RS-232	DCD	RXD	TXD	DTR	GND
PIN	6	7	8	9	
RS-232	DSR	RTS	CTS	RI	

➤ RS-485/422 serial port



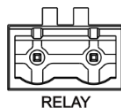
This series devices provide 5.08mm pitch 5-pin industrial terminal block and support RS-485/RS-422 serial port connection. The pin definitions as shown

in the follow table:

PIN	1	2	3	4	5
RS-485	D+	D-	GND	—	—
RS-422	T+	T-	GND	R+	R-

【Relay Connection】

Relay terminal blocks are a pair of normally open contacts in the alarm relay of the device. They are open circuit in the status of normal no alarm, and closed when any warning message occurs. For example: they are closed and send out alarm when power off. The product supports 1 relay warning message output, and warning messages output of the DC power supply or network abnormal alarm output. 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】



The product provides 4 pins DIP switch for function settings, where "ON" is the enable valid terminal.

DIP switch definitions as follows:

DIP	Definition	Operation
1	Reserved	-
2	Reserved	-
3	AT mode	Set the DIP switch to ON, user can enter AT command mode via serial port
4	Restore factory defaults	Set the DIP switch to ON, power on the device again, and turn off the DIP switch.

【Checking LED Indicator】

This device provides LED indicators to monitor the working conditions of the device, which has simplified the troubleshooting process comprehensively. The detailed status of each LED is described in the table as below:

LED	Status	Description
PWR (1-2)	ON	PWR is connected and running normally
	OFF	PWR is disconnected and running abnormally.
RUN	ON	The device is powering on or abnormal.
	OFF	The device is powered off or abnormal.
	Blinking	Blink once per second, the device is running well.
Link/Act (1-5)	ON	Ethernet port has established valid network connection.
	Blinking	Ethernet port is in an active network status.

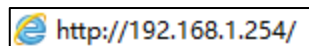
	OFF	Ethernet port connection has not established valid network connection.
TX (1-2)	OFF	No data or abnormal data is being transmitted through serial port
	Blinking	Serial port is transmitting data
RX (1-2)	OFF	No data or abnormal data is being received through serial port
	Blinking	Serial port is receiving data

【Logging in to WEB Interface】

This device supports 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 username and password of the device is "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, full/half duplex self-adaption or specified operating mode, support MDI/MDI-X self-adaption
100M fiber port	100Base-FX, support SC/ST/FC interface
RS-232 serial port	DB9 male connector, electrostatic protection 15kV
RS-485/422 serial port	5-pin 5.08mm pitch terminal block, isolation voltage 2kV, electrostatic protection 15kV
Alarm interface	2-core 7.62mm pitch terminal block, support 1 relay alarm information output, current loading capability 1A/24VDC, 0.5A/120VAC
Indicator	Power indicator, running indicator, interface indicator, alarm indicator and serial port transmission indicator

Switch property	
Backplane bandwidth	1.2G
Packet buffer size	0.5Mbit
MAC table size	2K
Power supply	
Input power supply	DC power supply products 12~48VDC Support dual power supply redundancy, nonpolarity, and anti-reverse connection Support built-in overcurrent 3.0A protection
Access terminal	4 pins 7.62mm pitch terminal blocks
Consumption	
IES615-2D (RS-232)	No-load: 0.84W @24VDC Full-load: 1.54W @24VDC
IES615-1F-2D (RS-232)	No-load: 1.80W @24VDC Full-load: 2.40W @24VDC
IES615-2F-2D (RS-232)	No-load: 2.50W @24VDC Full-load: 3.00W @24VDC
IES615-2DI (RS-485)	No-load: 1.22W @24VDC Full-load: 1.90W @24VDC
IES615-1F-2DI (RS-485)	No-load: 2.10W @24VDC Full-load: 2.60W @24VDC
IES615-2F-2DI (RS-485)	No-load: 3.00W @24VDC Full-load: 3.50W @24VDC
Environmental Limits	
Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%~95% (no condensation)
Protection grade	IP30 (aluminum shell)