3onedata GW1114-4DI Modbus Gateway Installation Guide

Contents

3onedata GW1114-4DI Modbus Gateway

Specifications

- Model: GW1114-4DI(3IN1)-RJ-P(12-48VDC)
- Features: 4 RS-485/422/232 serial ports with isolation, 2 100M copper ports, 1 12~48VDC power supply
- Indicators: Power indicator, Running indicator, Copper port connection indicator, Serial port transmission data

indicators, Serial port receiving data indicators
- Additional Features: Grounding screw, Terminal blocks for power input, Reset button, Console port, Wall mounting location hole

Product Usage Instructions

Mounting Dimension

Before mounting the device, ensure the environment is dry and the relative humidity is between 5% to 95% without condensation. Avoid areas near water.

Wall-mounted Device Mounting

1. Use M3 screws to install the left/right mounting board on the device backboard.
2. Place the device on the wall for reference and mark two screw positions with M4 screws ensuring a 2mm interspace.
3. Hang the device on the screws and slide downward, then tighten the screws for stability.

Wall-mounted Device Disassembling

1. Power off the device.
2. Unscrew the wall screws about 2mm.
3. Lift the device upward slightly to disassemble it.

Power Supply Connection

The device supports DC power input with V+ and V- as DC input terminals and FG as the power grounding input. The power supply range is 12-48VDC.

Reset Button Setting

To restore factory defaults, press the reset button for 4-5 seconds and then release it.

Serial Port Connection

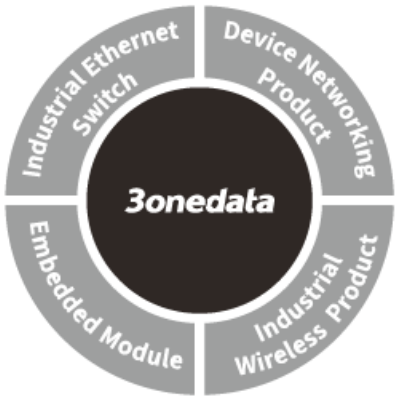
The device provides 4 3IN1 serial ports supporting RS232, RS485, and RS422 simultaneously. The interface type is RJ45 with the following pin definitions: PIN 1-8.

FAQ

- **Q: What do I do if any items in the package are damaged or lost?**
  - A: Please contact our company or dealers immediately to resolve the issue as soon as possible.

GW1114-4DI(3IN1)-RJ-P(12-48VDC) Modbus Gateway

Quick Installation Guide



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Package Checklist
Please check whether the package and accessories are intact while using the device for the first time.

1. Modbus gateway 2. Lugs
2. Power adapter 4. Straight-through cable
3. Foot pad 6. Warranty card
4. Certification

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

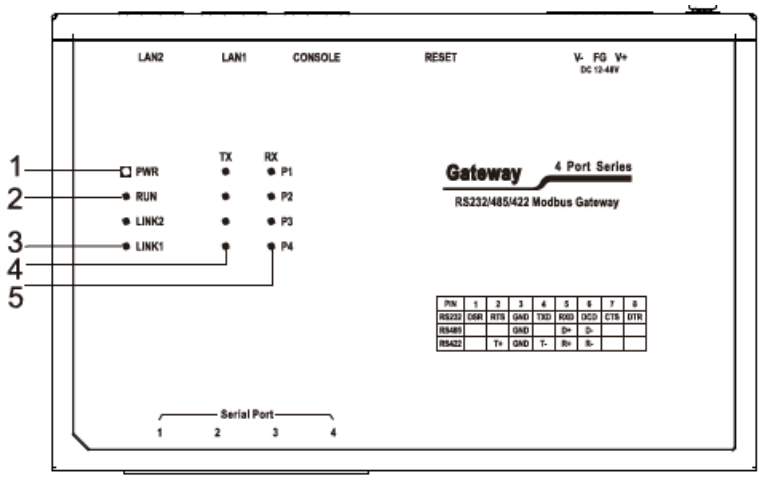
Product Overview

The product is wall-mounted MODBUS gateway device. Model is:GW1114-4DI(3IN1)-RJ-P(12-48VDC) (4

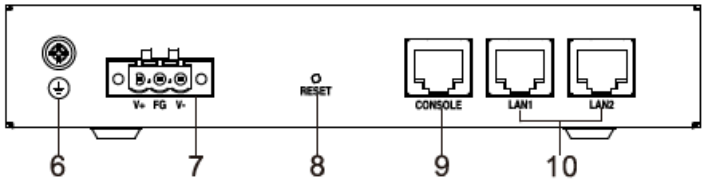
RS-485/422/232 serial ports with isolation + 2 100M copper ports + 1 12~48VDC power supply).

Panel Design

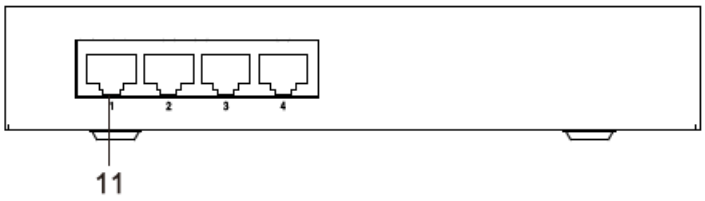
Top view



Front View



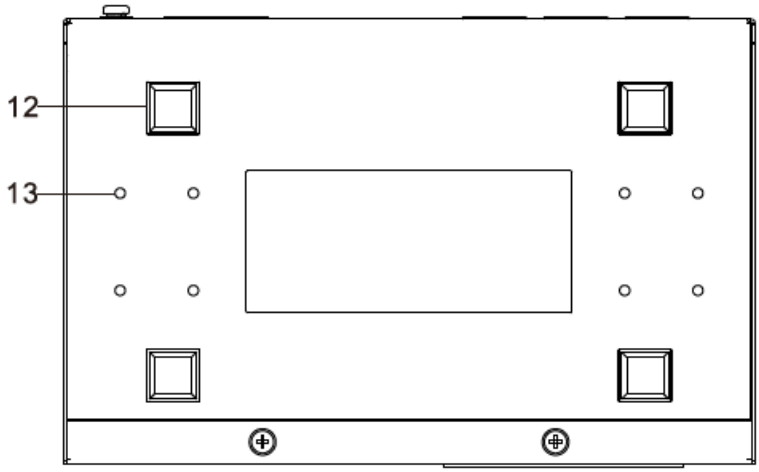
Rear View



Left view

Right view

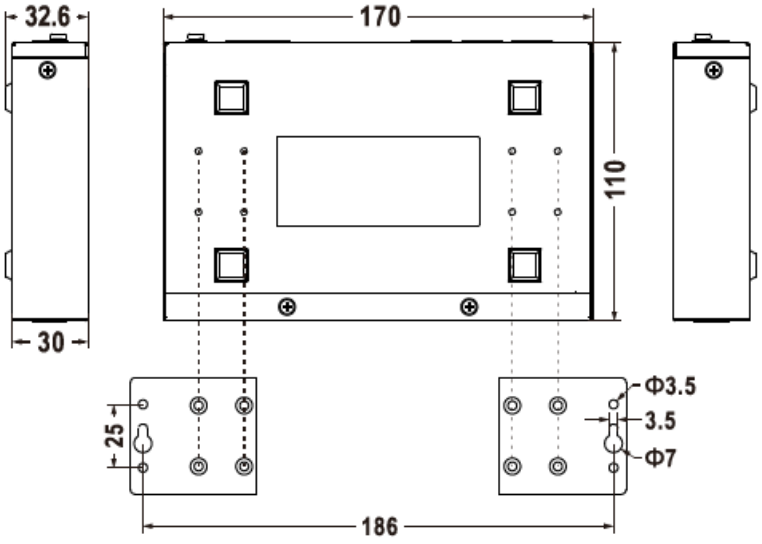
Bottom view



1. Power indicator
2. Running indicator
3. Copper port connection indicator
4. Serial port transmission data indicators
5. Serial port receiving data indicators
6. Grounding screw
7. Terminal blocks for power input Reset button
8. Console port
9. 100M copper port
10. RS-485/422/232 serial port
11. Foot pad
12. Wall mounting location hole

Mounting Dimension

Unit: mm

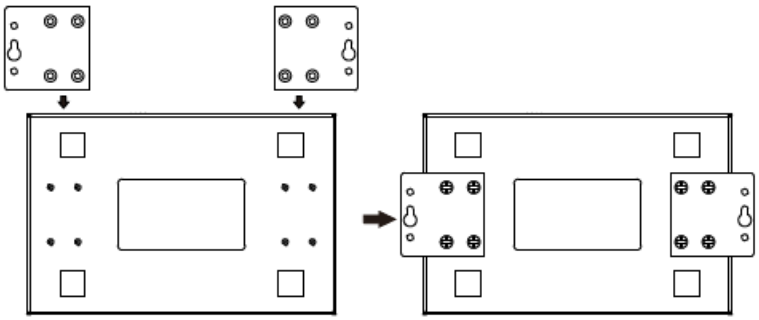


Notice Before Mounting

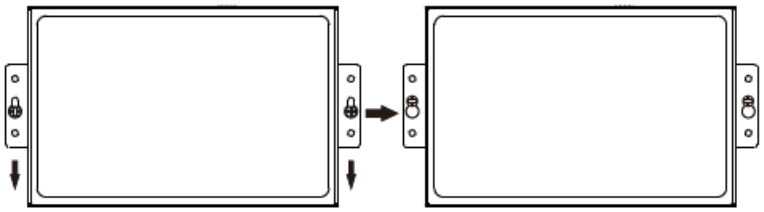
1. Don’t place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
2. Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device
3. The device surface temperature is high after running; please don’t directly contact to avoid scalding

Wall Mounted Device Mounting

Step 1 Adopt M3 screw to install the left/right mounting board on the device backboard.



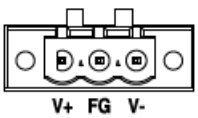
- **Step 2** On the wall of device mounting, place the device on the wall for reference or refer to the mounting dimension to mark two screw positions.
- **Step 3** Nail M4 screws on the wall and keep 2mm interspace reserved.
- **Step 4** Hang the device on two screws and slide downward, then tighten the screw to enhance stability, mounting ends.



(Wall-mounted Device Disassembling)

- **Step 1** Device power off
- **Step 2** Unscrew the screw on the wall about 2mm.
- **Step 3** . Lift the device upward slightly; take out the device disassembling ends.

Notice before power on
Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply plug contact and power on.
Power OFF operation: first unpin the power plug, then remove the power line, please note the operation order above.

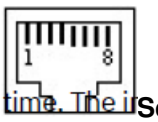


Power Supply Connection

This device supports 1 DC power input, and provides 3-Pin 5.08mm pitch terminal V+ FG V- blocks, in which V+ and V- are DC input, FG is the power grounding input; The power supply supports non- polarity, power supply range: 12~48VDC.

Reset Button Setting

This device provides 1 reset button, press the button for 4-5S then release it to restore factory defaults.



time. The i**Serial Port Connection**

This device provides 4 3IN1 serial ports, which support RS232, RS485 and RS422 at the same time. The interface type is RJ45 and its pin definitions are as follows:

PIN	1	2	3	4	5	6	7	8
	RS-232	DSR	RTS	GND	TXD	RXD	DCD	CTS	DTR
RS-485	—	—	GND	—	D+	D-	—	—	
RS-422	—	T+	GND	T-	R+	R-	—	—	

Checking LED Indicator

The device provides LED indicators to monitor the device working status with a comprehensive simplified troubleshooting; the detailed status of each LED is described in the table as below

LED	Indicate	Description
PWR	ON	PWR is connected and running normally
	OFF	PWR is disconnected and running abnormally
RUN	Blinking	The system is running normally
	OFF	The system is not running or running abnormally
	ON	System is running abnormally
LINK (1-2)	ON	Copper port has established an active network connection.
	Blinking	Copper port is in a network activity state.
	OFF	Copper port has not established an active network connection
TX (1-4)	OFF	Serial port is not transmitting data or transmitting data abnormally
	Blinking	Serial port is transmitting data.
RX (1-4)	OFF	Serial port is not receiving data

		or receiving data abnormally
	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

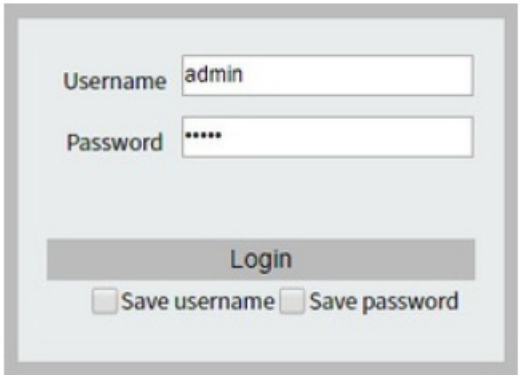
Step 1 Configure the IP addresses of computer and the device to the same network segment(The network segment of Network Port 1 is 1, and the network segment of network port 2 is 8), and the network between them can be mutually accessed.

Step 2 Enter device's IP address in the address bar of the computer browser.

- Network Ao+1168.1.254/
- http://192.168.8.254/

Network Port 2

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.

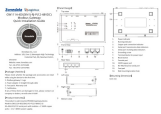
Note

- The default IP address of the device network port 1 is "192.168.1.254", port 2 is "192.168.8.254".
- The default user name and password of the device are "admin".
- If the user name or password is lost, user can restore it to factory settings via restore button 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
Serial Port	3IN1 RJ45 interface with isolation
Indicator	Power indicator, Running indicator, Copper port connection indicator, Serial port transmission and receiving data indicator
Power Supply	
Input power supply	12~48VDC
Access terminal block	3 pins 5.08mm pitch terminal blocks
Power Consumption	
No-load	3.4W@12VDC
Full-load	4.1W@12VDC
Working Environment	
Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%～95%(no condensation)
Protection grade	IP40(metal shell)

Documents / Resources

	3onedata GW1114-4DI Modbus Gateway [pdf] Installation Guide GW1114-4DI 3IN1 -RJ-P 12-48VDC, GW1114-4DI Modbus Gateway, GW1114-4DI, Modbus Gateway, Gateway

References

- 3onedata | Industrial Communication Solutions
- User Manual