3onedata
Make network communication more reliable

IAP2300C Series
Industrial Wireless Client
Quick Installation Guide

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【Package Checklist】

Please check the integrity of package and accessories while first using the wireless client.

1. Wireless client
2. DIN-Rail mounting attachment
3. 2.4G/5G dual-band antenna ×4
4. Wall-mounting panel x 2

Note: 2E single-frequency device antenna (standard), and 2E2E dual-frequency device antenna (optional).

5. Warranty card
6. Certificate

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

【Product Overview】

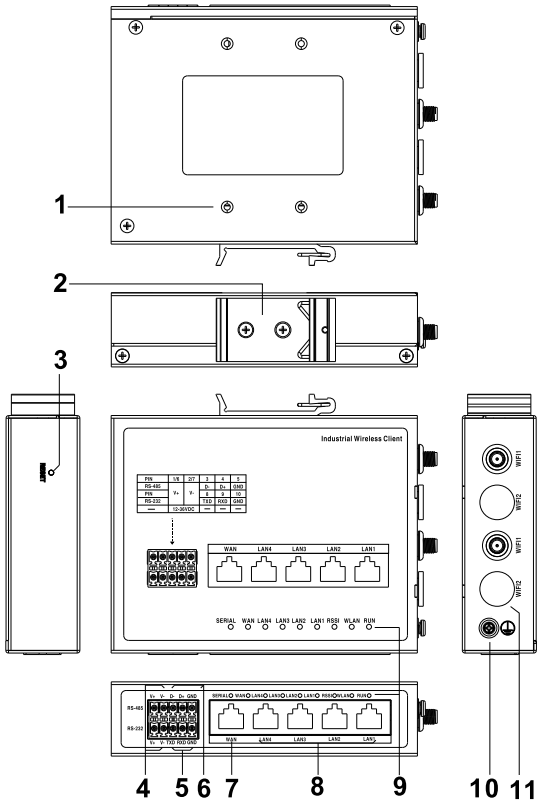
The products of this series are DIN-Rail/wall mounting industrial wireless clients. For convenience, the products of this series adopt the following number on the left in this guide, please confirm the number of your product:

Model I. IAP2300C-2E-5T-1D-P12_36 (2 2.4G/5G dual-band antenna interfaces + 1 100M LAN + 4 100M LAN + 1 RS-232/485 serial port, 12~36VDC power input).

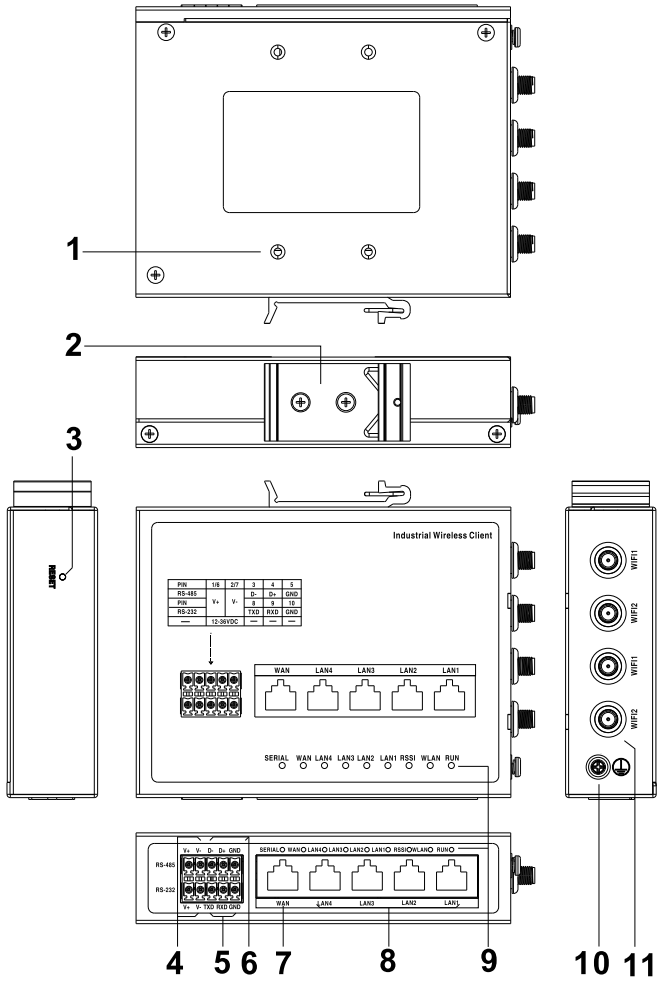
Model II. IAP2300C-2E2E-5T-1D-P12_36 (4 2.4G/5G dual-band antenna interfaces + 1 100M LAN + 4 100M LAN + 1 RS-232/485 serial port, 12~36VDC power input).

【Panel Design】

➢ **Model I**



➢ **Model II**



1. Wall-mounting location hole
2. DIN-Rail mounting kit
3. RESET button
4. Terminal blocks for power supply input
5. RS-232 serial port
6. RS-485 serial port
7. 10/100Base-T(X) 100M WAN port (WAN)
8. 10/100Base-T(X) 100M LAN port (LAN1-LAN4)
9. Device indicators, from left to right in turn they are:
   SERIAL indicator (SERIAL)
   WAN port indicator (WAN)
   LAN port indicator (LAN4-LAN1)

Signal strength indicator (RSSI)
Wireless network indicator (WLAN)
Running status indicator (RUN)

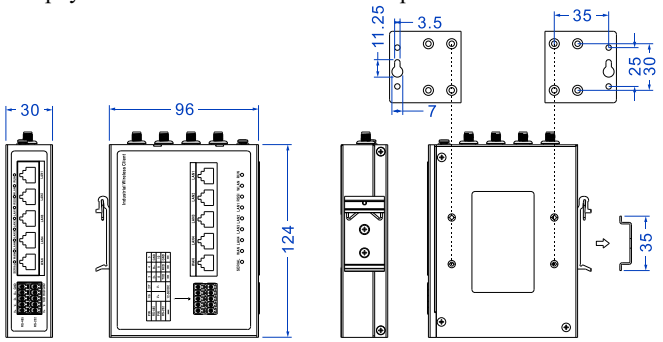
10. Grounding screw (M4)
11. 2.4G/5G dual-band antenna interface (WIFI1-WIFI2)

【Mounting Dimension】

Unit: mm

Note:

The physical dimensions of this series of products are the same.

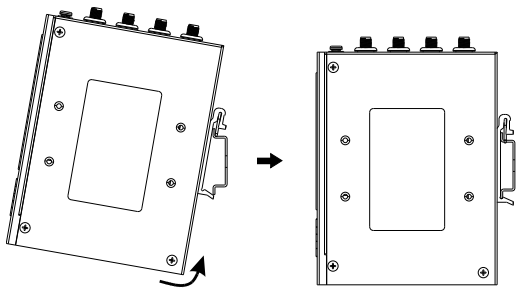


Notice Before Mounting:

- Don't place or install the device in area near water or moisture, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before powering on the device, check the power specifications supported by the device to prevent device damage due to overvoltage.
- 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 are as follows:



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

Step 2 Insert the top of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the bottom into DIN-Rail.

Tips:

Insert a little to the top, press downward and then insert to the bottom.

Step 3 Check and confirm the product is firmly installed on DIN-Rail, then mounting ends.

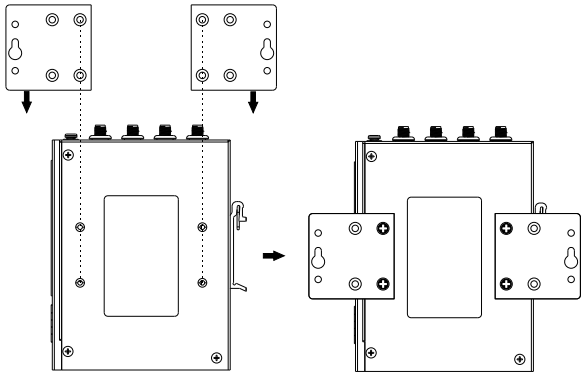
【Disassembling DIN-Rail】

Step 1 Power off the device.

Step 2 After pressing the device downward slightly, first shift out the bottom of DIN-Rail mounting kit, and then shift out the top of DIN-Rail, disassembling ends.

【Wall-mounted Device Mounting】

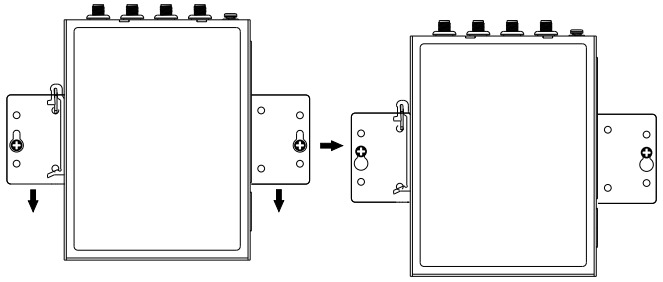
Step 1 Adopt M3 screw to install the left/right mounting board on the device side board.



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 M3 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 Power off the device.

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 Powering on:

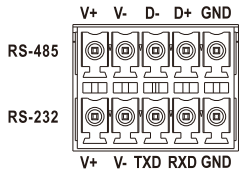
- Power ON operation: First insert the power supply terminal block into the device power supply interface,

and then plug the power supply plug 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】

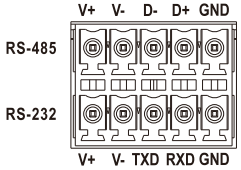
➢ **Model I, Model II**



Model I and Model II device of this series provide 2*5PIN 3.81mm pitch terminal blocks, power supply occupies the left 4 pins. Support 1 DC power supply input with anti-reverse connection protection. The pins are defined as shown in the figure on the left. V+ and V- are the positive and negative poles of power input, and any set of V+ and V- can be used for power input. Voltage range: 12~36VDC.

【Serial Port Connection】

➢ **Model I, Model II**



Model I and II of this series of device provide 1 RS-232/485 2-in-1 serial port. The interface type is 2*5PIN 3.81mm pitch terminal block, and the serial port occupies 6 pins on the right. The pin definitions are as follows:

PIN	1	2	3	4	5
Definition	V+	V-	D-	D+	GND
Description	12~36VDC power input		RS-485 serial port		
PIN	6	7	8	9	10
Definition	V+	V-	TXD	RXD	GND
Description	12~36VDC power input		RS-232 serial port		

【RESET Button Setting】

○ RESET The bottom panel of this device provides 1 RESET button, press the button for 1-3s then release it to reboot the device; press the button for 5s then release it to restore factory defaults. The SSID of debugging WLAN, that is, the Wi-Fi name is ADMIN-XXXXXX (X is the last six digits of the MAC address of the device), which is password-free, and is mainly used to temporarily access the device through the wireless network for debugging. After the device restarts or reconfigures the wireless, the device will automatically turn off the debugging WLAN.

【Antenna Connection】

Model I of this series device is equipped with two antennas as standard, and the antenna specifications are as follows:

Type	Gain (dBi)	Count (pcs)
2.4G/5.8G dual-band antenna	2	2

【Checking LED Indicator】

The series of devices 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:

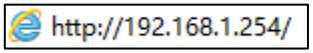
LED	Indicate	Description
RUN	ON	The device is powering on or the device is abnormal
	Blinking	The device is running normally
	OFF	The device is powered off or the device is abnormal.
WLAN	ON	Wireless network is enabled
	Blinking	Wireless network is in an active network status
	OFF	Wireless network is running abnormally or disabled
RSSI	ON	The wireless terminal has established bridge and the signal is great
	Blinking	0.5Hz blinking, the established bridge signal is normal; 1Hz blinking, and the established bridge signal is weak
	OFF	The wireless terminal has not established bridge
WAN/ LAN1-LAN4	ON	Ethernet port has established a valid network connection
	Blinking	Ethernet port is in an active network status
	OFF	Ethernet port has not established a valid network connection
SERIAL	Blinking	Serial port is sending/receiving data
	OFF	No serial port connection or no data transfer

【Logging in to WEB Interface】

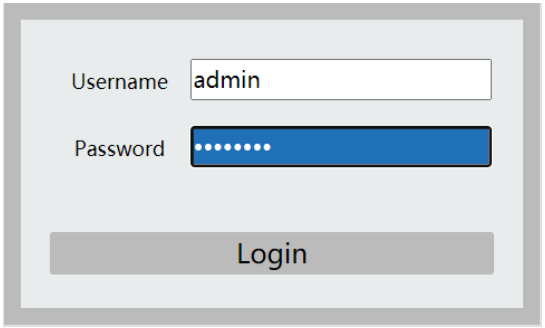
This device supports WEB management and configuration. Computer can access the device via Ethernet interface. The way of logging in to device's configuration interface via IE browser is shown as below:

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 "Login" 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 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 RESET 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	
Antenna	2.4G/5G dual-band antenna interfaces, RP-SMA-K(Female)
WAN	10/100Base-T(X) RJ45 interface
LAN	10/100Base-T(X) RJ45 interface
Serial port	RS-232/485/422 serial port adopts DB9 (Male); RS-232/485 serial port adopts 2*5PIN 3.81mm pitch terminal blocks (serial port occupies 6 pins)
Indicator	Running indicator, WLAN indicator, RSSI indicator, WAN indicator, LAN indicator, serial port indicator
Radio Frequency	
Channel	802.11b/g/n: 2.412GHz~2.4835GHz 802.11a/n: 5.18GHz~5.825GHz
RF power output	20dBm
Modulation scheme	DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM
Receiving Sensitivity	
802.11b	-95dBm@1Mbps, -89dBm@11Mbps
802.11g	-90dBm@6Mbps, -74dBm@54Mbps
802.11a	-89dBm@6Mbps, -72dBm@54Mbps
802.11n	-85dBm@MCS0, -67dBm@MCS7
Transmitting Power	
802.11b	23dBm@1Mbps, 20dBm@11Mbps
802.11g/a	23dBm@6Mbps, 20dBm@54Mbps
802.11n	23dBm@MCS0, 20dBm@MCS7
Power Supply	
Input power supply	12~36VDC, with reverse polarity protection
Access terminal block	2*5PIN 3.81mm pitch terminal block (power supply occupies 4 pins)
Power Consumption	
Model I	No-load at normal temperature: 1.79W@12VDC Full-load at normal temperature: 2.82W@12VDC Full-load at high temperature: 4.20W@12VDC
Model II	No-load at normal temperature: 3.36W@12VDC Full-load at normal temperature: 8.54W@12VDC Full-load at high temperature: 9.15W@12VDC
Working Environment	
Working temperature	-40℃-75℃
Storage temperature	-40℃-85℃
Working humidity	5%~95% (no condensation)
Protection grade	IP40 (metal shell)

【Disposal of Waste Electrical and Electronic Equipment (WEEE 2012/19/EU)】

(Applicable in the EU-member states)

The crossed-out wheeled bin symbol on the equipment or its packaging indicates that the product, at the end of its service



life, shall not be mixed with unsorted municipal waste but should be collected separately, in accordance with local laws and regulations.

A proper separate collection of end-of-life equipment for the subsequent recycling, treatment and environmentally compatible disposal, will help prevent potential damage to the environment and human health, facilitating the reuse, recycling and/or recovery of its component materials.

Private users should contact their vendor or municipal waste management service and ask for disposal information.

Professional users should contact their suppliers and check the terms of their selling agreement.

This product must not be disposed of with other commercial waste.

Users’ cooperation in the correct disposal of this product will contribute to saving valuable resources and protecting the environment.