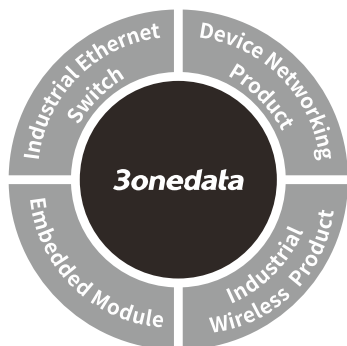# 3onedata
Make network communication more reliable

IAP2300-4A25-5T-PD2P12_48
Industrial Dual-band Wireless AP
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 industrial wireless AP for the first time.

1. Wireless AP
2. Quick Installation Guide
3. CD
4. DIN-Rail mounting attachment
5. Certification
6. Warranty card

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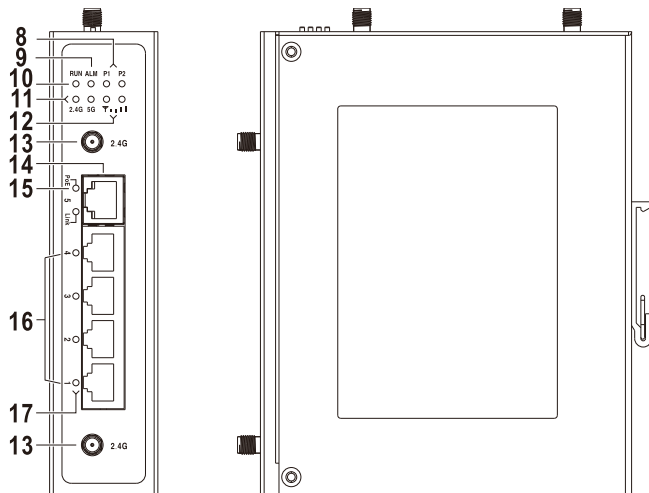
【Product Overview】

The product is an industrial dual-band wireless AP. Its model is IAP2300-4A25-5T-PD2P12_48 (2 2.4G antenna interfaces + 2 5.8G antenna interfaces + 1 100M PoE WAN port + 4 100M LAN ports + 12~48VDC redundant power supply).

【Panel Design】

➢ **Top view, bottom view and rear view**
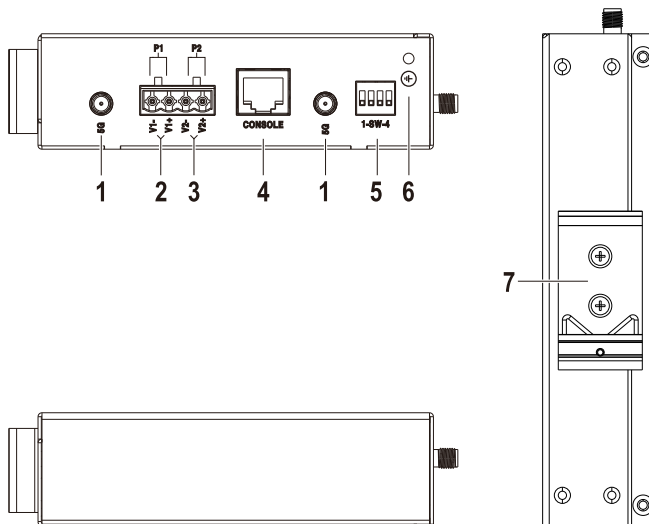

➢ **Front view and Side view**

1. 5.8G antenna interface
2. Power supply P1 input terminal block
3. Power supply P2 input terminal block
4. Console port
5. DIP switch
6. Grounding screw
7. DIN-Rail mounting kit
8. Power supply indicator (P1-P2)
9. Alarm indicator (ALM)
10. Running indicator (RUN)
11. 2.4/5G WLAN indicator (2.4G, 5G)
12. WLAN bridge signal strength indicator（ ）
13. 2.4G antenna interface
14. 100M PoE WAN (5)
15. PoE indicator (PoE)
16. 100M LAN port (1-4)
17. Ethernet port indicator(1-5)

【Mounting Dimension】

Unit: mm
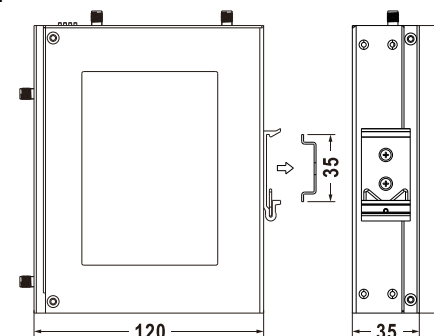
⚠ **Notice Before Mounting:**

● 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】

The product adopts 35mm standard DIN-Rail mounting, which is suitable for most industrial scenes; mounting steps as below:
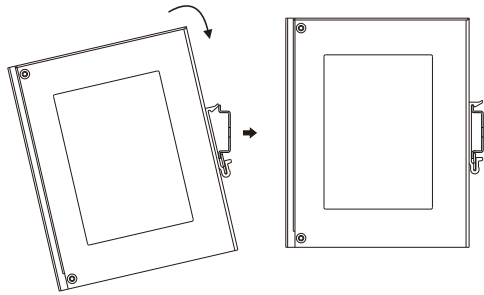
Step 1　Check whether the DIN-Rail mounting kit that comes with the device is installed firmly.

Step 2　Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, 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】

➢ **12~48VDC power supply**

The device provides 4-pin 5.08mm pitch power supply input terminal blocks. Supports P1 and P2 two independent DC power supply systems, when one of the power supplies fails, it could switch to another one immediately to ensure the device
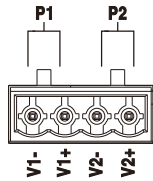
 power supply will not be interrupted. The power supply supports non-polarity connection, and the equipment can still work normally after reverse connection. Power supply range: 12~48VDC.

➢ **PoE power supply input**

The WAN port of this device supports PoE power receiving, which conforms to IEEE802.3af/at standard.

【DIP Switch Settings】

 The device provides 4 pins DIP switch for function setting, in which "ON" is the enabled end. The definitions of DIP switch are as follows:

DIP	Definition	Operation
1	Restore Factory Settings	Set the switch to ON and power on the device again, then set it back after one minute.
2-4	Reserved	—

【Checking LED Indicator】

This series 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
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.
ALM	ON	Restore factory setting alarm, an alarm is issued when the restore factory setting alarm switch is set to the enabled state
	OFF	No restore factory settings alarm
P1/P2	ON	PWR is connected and running normally
	OFF	PWR is disconnected or running abnormally

LED	Indicate	Description
2.4G/5G	ON	2.4G/5G wireless network is enabled
	Blinking	2.4G/5G is in an active network status
	OFF	2.4G/5G wireless network is running abnormally or turned off
▼..ıl	○ ○	All indicators are off, it means the signal of the opposite end is weak
	☼ ○	One indicator is on, which means the signal of the opposite end is normal
	☼ ☼	Two indicators are on, which means the wireless signal at the opposite end is good
POE	ON	POE ports receive power supply normally
	OFF	POE is disabled or disconnected
1-5	ON	The Ethernet interface has established a valid network connection.
	Blinking	Ethernet port is in an active network status.
	OFF	Ethernet port has not established valid network connection

【Logging in to WEB Interface】

This device supports WEB management and configuration. Computer can access the device via LAN. 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.
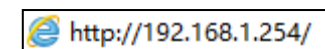
 http://192.168.1.254/

Step 3 Enter device's username and password in the login window as shown below.

Username admin

Password ••••••••

Login

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 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

WAN port	1 10/100/Base-T(X) RJ45 port, support PoE 48VDC power supply input
LAN port	4 10/100Base-T(X) RJ45 ports
Antenna Interface	2 2.4G RP-SMA-K (Female) interfaces 2 5.8G RP-SMA-K (Female) interfaces
Indicator	Running indicator, alarm indicator, power indicator, 2.4G/5.8G indicator, WLAN bridge signal strength indicator, interface indicator, PoE indicator

WiFi Transmission Rate

802.11n	6.5~300Mbps
802.11b	11/5.5/2/1Mbps
802.11g/a	54/48/36/24/18/12/9/6Mbps
802.11ac	65Mbps~867Mbps

WiFi Radio Frequency

2.4G channel	2.412GHz~2.4835GHz
5G channel	5.18GHz~5.825GHz
RF power output	20dBm
Modulation method	DBPSK,DQPSK,CCK,OFDM,16-QAM,64-QAM

WiFi Receiving Sensitivity

802.11n_HT40	-82dBm@MCS0,-64dBm@MCS7
802.11n_HT20	-85dBm@MCS0,-67dBm@MCS7
802.11g/a	-91dBm@6Mbps,-72dBm@54Mbps
802.11b	-93dBm@1Mbps,-87dBm@11Mbps
802.11ac	-84dBm@MCS0,-59dBm@MCS9

WiFi Transmitting Power

802.11n_HT40	20dBm@MCS0,20dBm@MCS7
802.11n_HT20	20dBm@MCS0,20dBm@MCS7
802.11g/a	20dBm@6Mbps,20dBm@54Mbps
802.11b	20dBm@1Mbps,20dBm@11Mbps
802.11ac	20dBm@MCS0,20dBm@MCS9

Power Supply

Input power supply	- 12~48VDC dual power supply redundancy, support non-polarity, 4-pin 5.08mm pitch terminal block; - WAN port supports PoE 48VDC power supply input

Power Consumption

No-load	3.0W@24VDC
Full-load	7.9W@24VDC (high temperature)

Working Environment

Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%～95%(no condensation)
Protection grade	IP40 (metal shell)