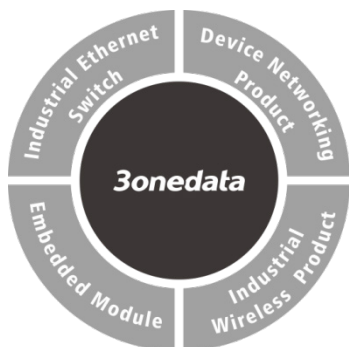**3onedata**
Make network communication more reliable

IAP2300-2N2-5T-2LVI
Wireless Single-band 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 x1
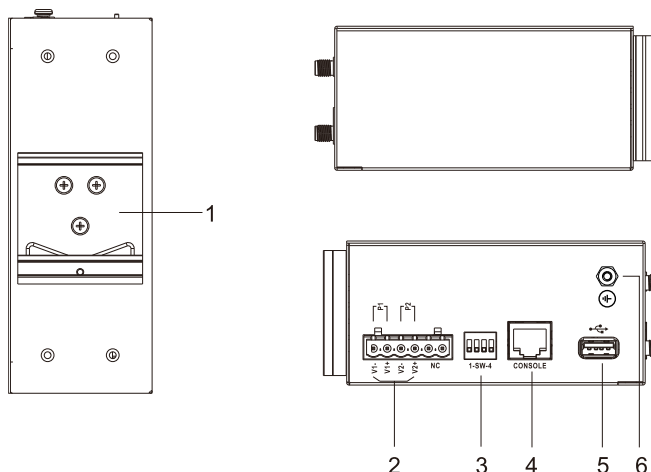2. WIFI antenna x2
3. DIN-Rail mounting attachment

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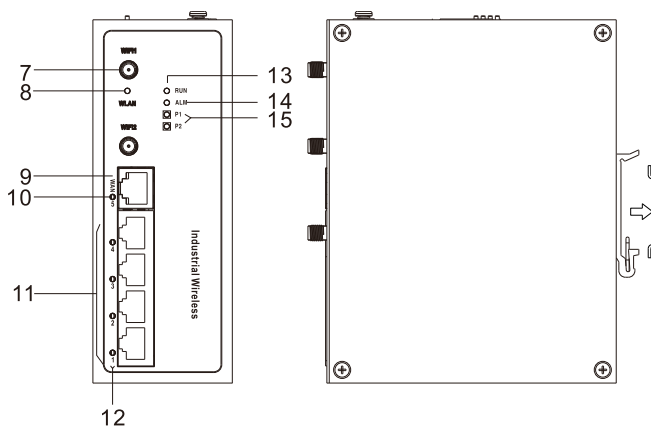
【Product Overview】

The product is a rail wireless single-frequency AP. The model is IAP2300-2N2-5T-2LVI (2 WIFI antenna interfaces + 1 WAN port + 4 LAN ports).

【Panel Design】

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

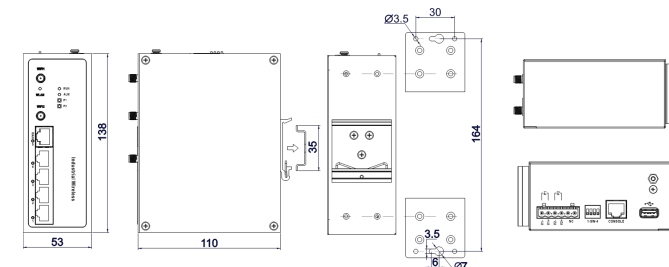➢ **Front view and side view**

1. DIN-Rail mounting kit
2. Power supply input terminal block
3. DIP switch
4. Console port
5. USB interface
6. Grounding screw
7. WIFI antenna interface
8. WLAN indicator
9. WAN port
10. WAN port connection indicator
11. LAN port
12. LAN port connection indicator
13. Running indicator
14. Alarm indicator
15. Power indicator

【Mounting Dimension】

Unit: mm

Note:

In the installation dimension figure, the right side is wall mounting pegboard, the accessories are non-factory standard and need additional purchase.

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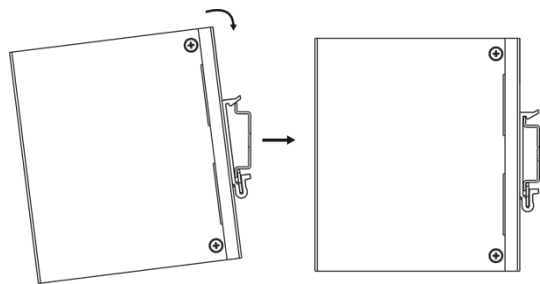
Step 1 Check whether the DIN-Rail mounting kit that comes with the device is installed firmly.

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.

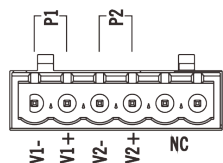Step 3 Check and confirm the product is firmly installed on DIN-Rail, then mounting ends.

【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.

【Power Supply Connection】

➢ **DC power supply**

The device provides 6-pin 5.08mm pitch power supply input terminal blocks, among which power supply occupies the left four pins and the right two NC pins are reserved. It also supports two independent DC power supply systems, P1 and P2, which enable two terminals to connect to the device. It could ensure the normal operation of the device when one of the systems fails, thus improving the reliability of network operation. Voltage range: 12~36VDC.

 Notice:

● 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.

【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 Switch	Definition	Operation
1	Restore Factory Settings	Set the DIP switch to ON, power on the device again, it will restore to factory settings, then turn off the DIP switch.
2	Reboot	Set the DIP switch to ON, the device restart, then turn off the DIP switch.
3	Reserved	-
4	Reserved	-

【Console Port Connection】

The device provides 1 program debugging port based on RS232 serial port which can conduct device CLI command management after connecting to PC. The interface adopts RJ45 port, the RJ45 pin definition as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

【USB Port Connection】

Reserved

【Antenna Connection】

The device provides 2 WIFI antennas, the antenna specifications are shown below:

Type	P/N	Gain (dBi)	Quantity

			(pcs)
2.4G wireless	3005040056	5	2

【Checking LED Indicator】

The device provides 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
WLAN	ON	WIFI is running normally
	OFF	WIFI is running abnormally or closed
RUN	ON	The device is powering on or the device is abnormal.
	OFF	The device is powered off or the device is abnormal.
	Blinking	The device is running normally
ALM	ON	Power supply, port link has alarm
	OFF	Power supply, port link have no alarm
P (1-2)	ON	Power is connected and running normally
	OFF	Power supply is disconnected or running abnormally
Link (1-5)	ON	The copper port has established an active network connection
	Blinking	The copper port is in an active network status
	OFF	The copper port has not established an active network connection.

【Specification】

Standard	
Standard	IEEE802.3, IEEE802.3u, IEEE802.11b/g/n, IEEE802.11i, IEEE802.11r, IEEE802.3af/at
Panel	

Copper Port	5 10/100Base-T(X) RJ45 ports, configure 4 LAN + 1 WAN	**Power Supply**	
Antenna interface	2 WIFI antenna interfaces, RP-SMA-K(Female)	Input power supply	Dual power supply redundancy, voltage range: 12 ～ 36VDC, support non-polarity, built-in overcurrent 2.0 protection
Indicator	WLAN port connection indicator, running indicator, alarm indicator, power supply indicator, LAN port connection indicator	Access terminal block	6-pin 5.08mm pitch terminal blocks(power supply occupies 4 pins)
WIFI Transmission Rate		**Power Consumption**	
802.11n	6.5~300Mbps	No-load power at normal temperature	1.8W@12VDC 1.8W@24VDC 2.0W@36VDC
802.11b	11/5.5/2/1Mbps		
802.11g	54/48/36/24/18/12/9/6Mbps		
WIFI RF		Full-load power at high temperature	5.8W@12VDC 5.4W@24VDC 5.4W@36VDC
Channel	2.412GHz~2.4835GHz		
RF power output	23dBm		
Modulation scheme	DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM	**Working Environment**	
		Working temperature	-40~75℃
WIFI Receiving Sensitivity		Storage temperature	-40~75℃
802.11n_HT40	-82dBm@MCS0, -64dBm@MCS7	Working humidity	5%～95% (no condensation)
		Protection grade	IP30(metal shell)
802.11n_HT20	-85dBm@MCS0, -67dBm@MCS7		
802.11g	-91dBm@6Mbps, -72dBm@54Mbps		
802.11b	-93dBm@1Mbps, -87dBm@11Mbps		
WIFI Transmission Power			
802.11n_HT40	23dBm@MCS0, 20dBm@MCS7		
802.11n_HT20	23dBm@MCS0, 20dBm@MCS7		
802.11g	23dBm@6Mbps, 20dBm@54Mbps		
802.11b	23dBm@1Mbps, 23dBm@11Mbps		