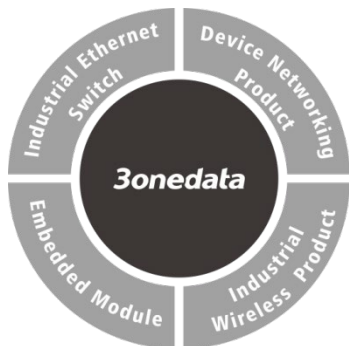


IAP3600Exi-2225-2GS4GT -SMA -P12_48 Safety Dual-Frequency Wi-Fi6 Industrial Wireless AP for Mine Quick Installation Guide



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【Package Checklist】

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

1. Wireless AP
2. Certification
3. Warranty card

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

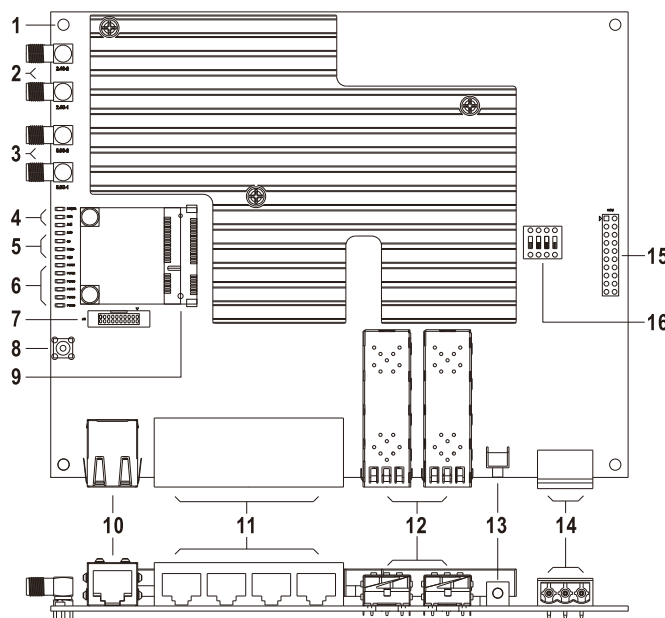
【Product Overview】

This product is a Gigabit safety dual-frequency Wi-Fi6 industrial wireless AP bare board for mine. The model is IAP3600Exi-2225-2GS4GT-SMA-P12_48 (2 2.4G antenna interfaces + 2 5G antenna interfaces + 2 Gigabit SFP slots + 4

Gigabit copper ports, 1 12~48VDC power input (12~24VDC safety input)).

【Panel Design】

➤ Main view and bottom view

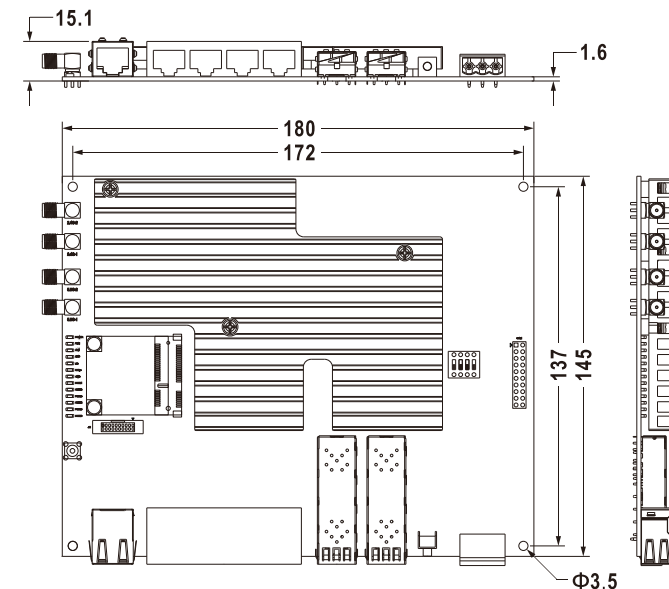


1. Location hole
2. 2.4G antenna interface
3. 5G antenna interface
4. Power indicator (PWR), running indicator (RUN), alarm indicator (ALM)
5. 2.4G wireless signal indicator (2.4G), 5G wireless signal indicator (5G), Bridge signal strength indicator (bridge), UWB location indicator (UWB, reserved)
6. Ethernet port indicator (Port1-Port6)
7. External indicator pin (bit number J11)
8. UWB location antenna interface (UWB, reserved)
9. UWB module interface (reserved)
10. CONSOLE port
11. Gigabit copper port (Port1-Port4, LAN port)
12. Gigabit SFP slot (Port5-Port6, WAN/LAN port)

13. RESET button
14. Terminal blocks for power supply input
15. JTAG debugging port (reserved, used for software debugging and burning program)
16. DIP switch (used for software debugging and burning program)

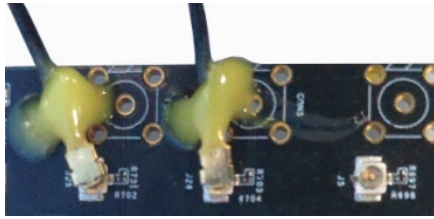
【Mounting Dimension】

Unit: mm



Note 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.
-



- If the device is used in high temperature environment, it is recommended to add thermal pad at the bottom of the mainboard to transfer heat to the chassis for heat dissipation.

【Power Supply Connection】



V- FG V+

The device provides 3-pin 5.08mm pitch terminal blocks for power input and supports 1 DC power supply input. This power supply supports anti-reverse connection and slow start. The definitions of power pin are shown in the left figure, and the power input range is 12~48VDC, and the input range of safety power is 12~24VDC.

【Console Port Connection】

The product provides 1 program debugging port based on RS-232 serial port which can conduct device CLI command management by connecting to PC. The interface adopts RJ45 port, the RJ45 pin definition is as follows:

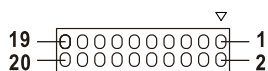
Pin No.	2	3	5
Definition	TXD	RXD	GND

【Reset Button Setting】



The device provides 1 RESET button that can be used to reboot the device and restore factory defaults. Press the RESET button for 1~2s and release it, and the device will restart automatically; Press and hold the RESET button for 5s and release it, and the device will automatically restore the factory defaults.

【External LED Indicator】

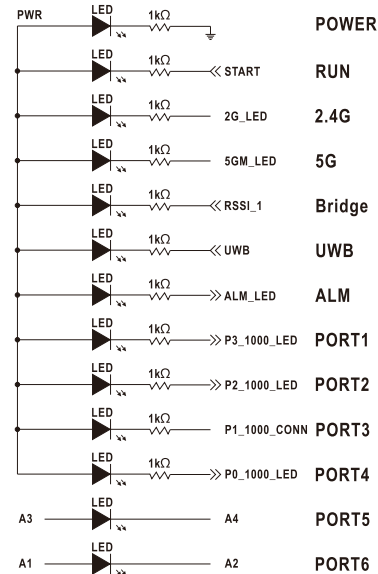


The device provides 2*10PIN 1.27mm pitch external LED indicator pins (bit number J11), and

users can connect external indicators according to actual needs. It is recommended to install a Box header connector with 2 * 2*10PIN 1.27mm pitch and 180° at J11, and connect it with the external circuit. The pin definitions of external indicator are shown as follows:

PIN	Definition	PIN	Definition
1	5GM_LED	2	ALM_LED
3	2G_LED	4	START
5	GND	6	PWR(3.3V output)
7	UWB (Reserved)	8	RSSI_1
9	P1_1000_CONN	10	P0_1000_LED
11	P3_1000_LED	12	P2_1000_LED
13	A7 (unused)	14	A8 (unused)
15	A5 (unused)	16	A6 (unused)
17	A3	18	A4
19	A1	20	A2

The reference circuit of external indicator is shown below.



【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
POWER	ON	Power supply is running normally
	OFF	Power supply is disconnected or running abnormally
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	Device restore factory setting alarm
	OFF	Without device alarm
2.4G	ON	2.4G wireless signal is running normally
	Blinking	2.4G wireless signal is transmitting data
	OFF	2.4G wireless signal is running abnormally or turned off
5G	ON	5G wireless signal is running normally
	Blinking	5G wireless signal is transmitting data
	OFF	5G wireless signal is running abnormally or turned off
Bridge	ON	The strength of bridging signal is 70~100
	Blinking	1 time/1s, the strength of bridging signal is 30~70; 1 time/2s, the strength of bridging signal is 1~30
	OFF	No bridging is established
UWB	—	Reserved, not enabled yet
Port (1-6)	ON	The Ethernet interface has established an active network connection
	Blinking	The Ethernet interface is in a network activity state.
	OFF	The Ethernet interface has not established an active network

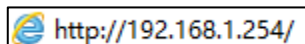
LED	Indicate	Description
		connection.

【Logging in to WEB Interface】

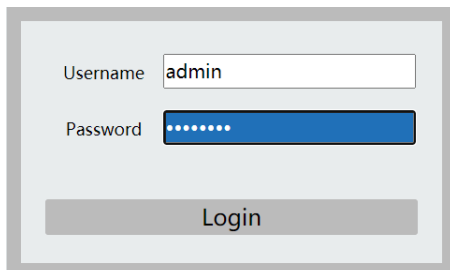
This device supports WEB management and configuration. Computer can access the device via device LAN port. The way of logging in to device's configuration interface via IE browser is shown as below:

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	
Gigabit copper port	10/100/1000Base-T(X) self-adaption, RJ45, LAN port, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotuning
Gigabit SFP	1000Base-X SFP slot, LA/ WAN port
2.4G	2.4G antenna interface, SMA-J type (Female)
5G	5G antenna interfaces, SMA-J type (Female)
UWB	UWB antenna interface (reserved)
CONSOLE	CLI command management port (RS-232), RJ45
Indicator	Power indicator, running indicator, alarm indicator, 2.4G indicator, 5.8G indicator, bridge signal strength indicator, UWB indicator (reserved), interface indicator
Radio Frequency	
802.11b/g/n/ax	2.412GHz~2.4835GHz
802.11a/n/ac/ax	5.18GHz~5.825GHz
RF power output	20dBm
Modulation scheme	DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM, 256-QAM, 1024QAM
Receiving Sensitivity	
802.11b	-87dBm@1Mbps, -76dBm@11Mbps
802.11g/a	-82dBm@MCS0, -65dBm@MCS7
802.11n	-82dBm@MCS0, -64dBm@MCS7
802.11ac	-82dBm@MCS0, -57dBm@MCS9
802.11ax	-82dBm@MCS0, -52dBm@MCS11
Transmitting Power	
802.11b	23dBm@1Mbps, 20dBm@11Mbps
802.11g/a	23dBm@6Mbps, 20dBm@54Mbps

802.11n	23dBm@MCS0, 18dBm@MCS7							
802.11ac	23dBm@MCS0, 18dBm@MCS9							
802.11ax	23dBm@MCS0, 18dBm@MCS11							
Power Supply								
Input power supply	12~48VDC, the input range of safety power is 12~24VDC, anti-reverse connection and slow start are supported							
Access terminal block	3-pin 5.08mm pitch terminal blocks							
Power Consumption								
Normal temperature (25°C)	Transmitting Power(dBm)	Voltage (VDC)	Peak Value (A)	Full Mean Load (W)	Full Peak Load (W)			
				20	12	1.299	14.3	16.2
					18	0.885	14	16.6
	27	24	0.686	14.2	16.8			
		12	1.558	15	20			
			18	1.041	14.8	21.3		
High temperature (75°C)	Transmitting Power(dBm)	Voltage (VDC)	Peak Value (A)	Full Mean Load (W)	Full Peak Load (W)			
				20	12	1.299	14.3	16.2
					18	0.885	14	16.6
	27	24	0.686	14.2	16.8			
		12	1.558	15	20			
			18	1.041	14.8	21.3		
27	24	0.813	14.4	21.3				
	Working Environment							
	Working temperature	-40~75°C						
Storage temperature	-40~85°C							
Working humidity	5%~95% (no condensation)							