



WIFI6 OUTDOOR DUAL BAND WIRELESS AP

Model: UAP6-1800



 ULNA Store: <https://www.amazon.com/ulna>
 Customer Service Email: support01@ulnastore.com

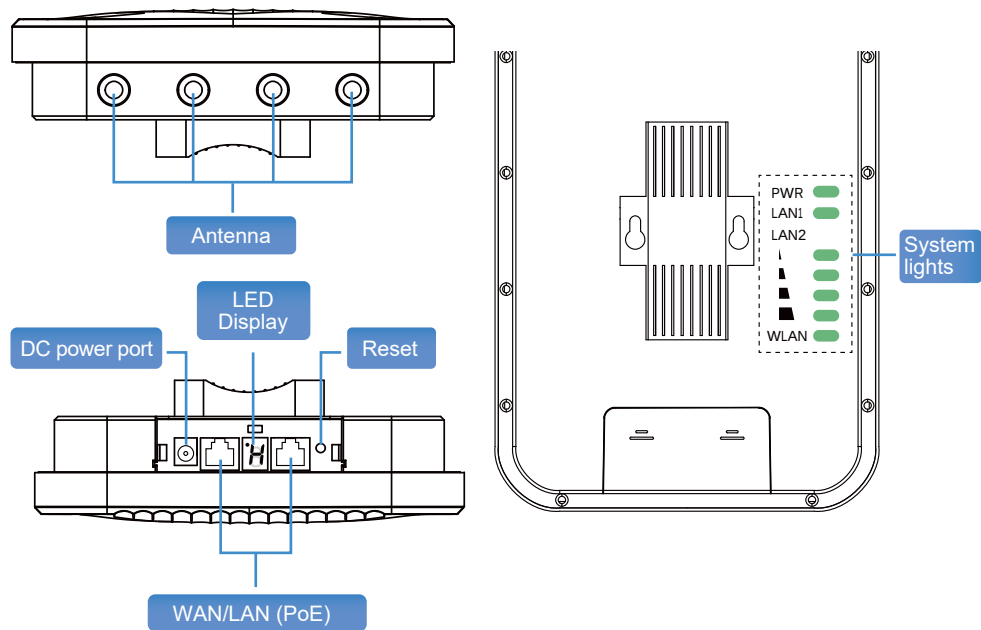
Content

1. Preface	01
2. Hardware Overview	02
2.1 System Lights Description	02
2.2 Button Description	04
3. Package Include	05
4. Specifications	07
5. Equipment assembly	08
6. Equipment Installation	08
6.1 Pole Mounting	08
6.2 Wall Mounting	09
7. Equipment Connection	10
7.1 PoE Power Supply	10
8. Equipment Configuration	11
8.1 Connection Methods	11
8.2 Device Login	12
8.3 Mode Selection	17
9. Firmware Upgrade	20
10. Product Precautions	21
11. Troubleshooting / Q&A	22
12. Service & Contact	25
13. FCC Statement	26

1. Preface

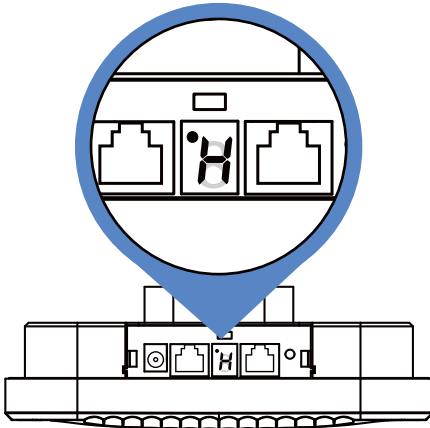
- This WiFi6 Outdoor Dual Band Wireless AP delivers high-speed WiFi **(2.4GHz 600Mbps + 5.8GHz 1200Mbps)**. Powered by a dual-chip solution **(MT7975DN + MT7915DEN)**, it ensures low latency, high concurrency, and stable performance for streaming, large file transfers, and multiple user access.
- Equipped with four **8dBi** omnidirectional antennas, high-power PA, and signal enhancement, it provides stable coverage up to 300 meters in open areas with strong interference resistance and wall penetration.
- The device supports AP, and Repeater modes for flexible deployment. Standard 48V PoE (802.3af/at) simplifies installation with cable runs up to 100 meters (328 ft) .
- With a Gigabit Ethernet port and large memory, it supports **50+** concurrent users, making it ideal for high-density environments. **IP67**-rated housing and 15kV surge protection ensure reliable operation in extreme weather **(-40°F to 131°F)**.
- Additional features include seamless roaming, automatic channel optimization, weak signal disconnection, and IPV6 support. An intuitive web-based interface allows for easy configuration and maintenance.
- Ideal for courtyards, warehouses, farms, parking lots, and commercial outdoor spaces, this AP offers enterprise-grade reliability for diverse wireless deployments.

2. Hardware Overview



2.1 System Lights Description

Name	State	Description	Diagram
PWR	ON	Normal power supply to equipment	PWR LAN1 LAN2 WLAN
	OFF	Abnormal power supply to equipment	
LAN 1 / LAN 2	ON	Connected	
	OFF	Disconnected	
WIFI	Display Wi-Fi Signal Strength		

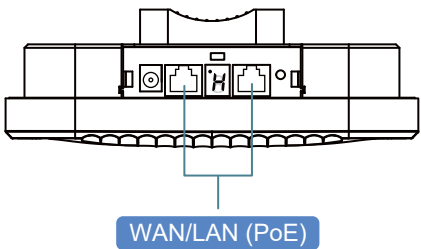
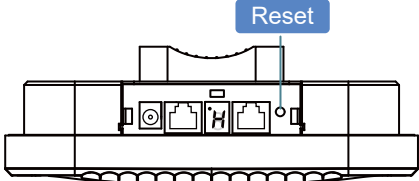
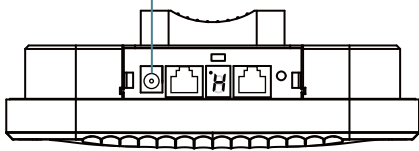
LED Display	H	AP/RESET Mode /Factory settings required (default)	LED Display 
	0 Repeater Mode	No Link, please check if you have the correct wifi password	
	5 Repeater Mode	Successful Connection, Signal is Good Link	
	7 Repeater Mode	Successful Connection, Signal is pretty Good	
	9 Repeater Mode	Successful Connection, Signal is Excellent	

Note:

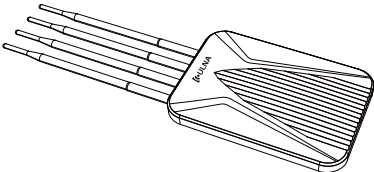
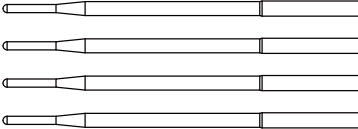
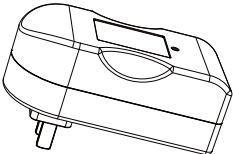
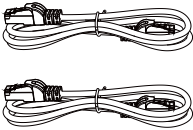
LED Display H

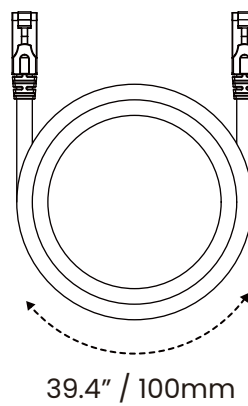
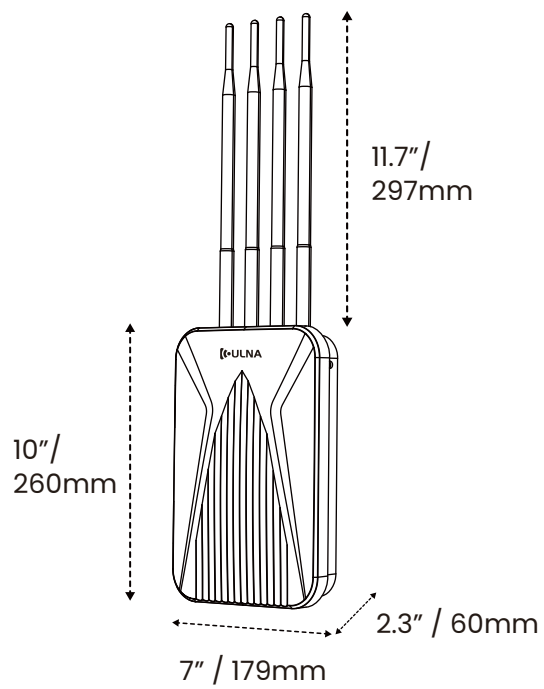
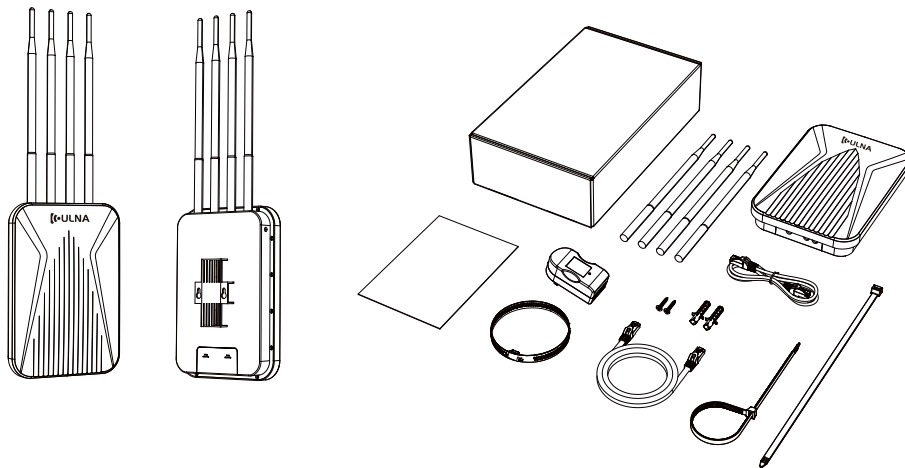
1. The default H when starting up is in the mode that needs to be set or in the factory mode after resetting through the reset button.
2. Set to AP mode, display H, user-defined AP mode.

2.2 Button Description

Name	Description	Diagram
PWR	Connects to a computer or upstream device. Supports 802.3AT/AF protocol □ standard PoE power supply. Supports DC 48V/0.5A non-standard PoE power supply.	 Diagram showing the PWR port (WAN/LAN (PoE)) on the device.
Reset button	Long press for more than 15 seconds to restore the system to its default factory settings	 Diagram showing the Reset button on the device.
DC power port	Power the device via this port	 Diagram showing the DC power port on the device.

3. Package Include

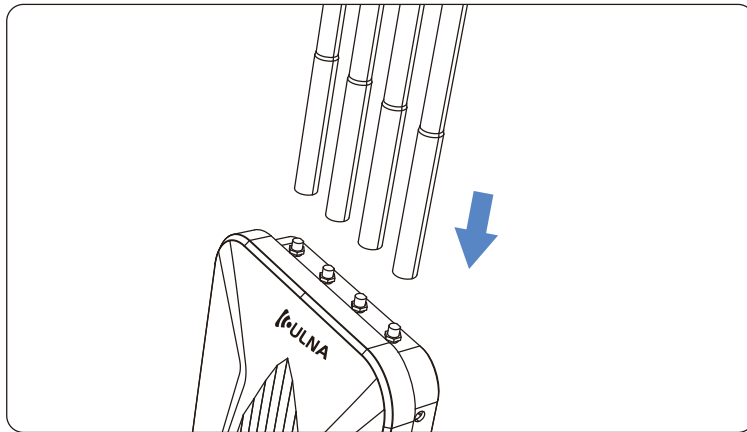
Wireless Access Point	1	
8 dBi Dual-Band Omnidirectional Rubber Duck Antenna with SMA Connector	4	
24V PoE Power Supply (FCC Certified for US Standard / CE Certified for EU Standard / CCC Certified for China Standard — available upon customer request)	1	
Adjustable Pole Clamp	1	
1 m (3.28 ft) Ethernet Cable	2	
Cable Ties	2	



4. Specifications

Product Name	WiFi6 Outdoor Dual band wireless AP	
Name	UAP6-1800	
Hardware Specifications		
Master Control	Antenna	4 × 8 dBi Omnidirectional High-Gain Dual-Band Rubber Duck Antenna
	Ports	2*10/100/1000Mbps RJ45 1* DC Socket 1* RESET KEY
	LED Indicators	SYS, Lan1, Lan2, 5G Wi-Fi Signal Indicator (×4)
	Wireless Data Rate	11b : 1/2/5.5/11Mbps 11g : 6/9/12/18/24/36/48/54Mbps 11n : Up to 300Mbps 11ac: Up to 900Mbps 11ax: Up to 1200Mbps
	Standard	IEEE802.11b/g/n, IEEE802.11a IEEE802.11ac+, IEEE802.3u
	Supported Protocols	CSMA/CA, TCP/IP, IPX/SPX, NetBEUI, DHCP, NDIS3, NDIS4, NDIS5
	Data Encryption	WPA-PSK/WPA2-PSK/WPA3-PSK、WPA/W-PA2/WAP3
Buttons	Reset Button	Press and hold for 5 seconds to restore factory default settings
PoE Power Supply	24V 1.0A / 48V 0.5A	Gigabit PoE Power Supply — FCC Certified (US Standard) / CE Certified (EU Standard)
DC Power Supply	12V 1.0A	CCC Power Supply (Alternative to PoE Power Supply — choose one)
Maximum Concurrent Clients	50+ terminals	
Transmission Range	200m (656 ft)	

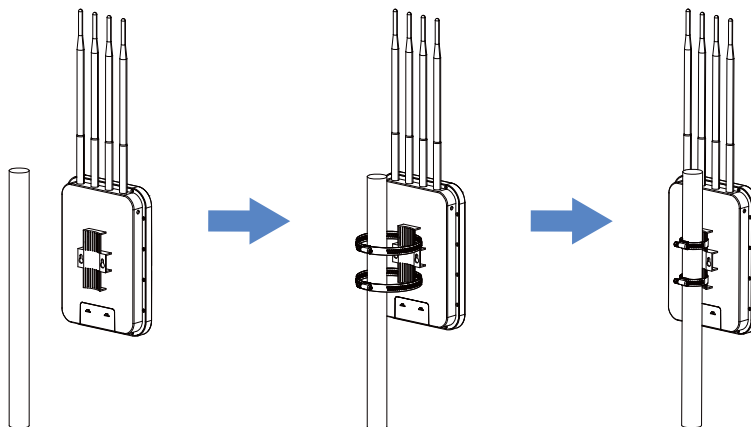
5. Equipment assembly



6. Equipment Installation

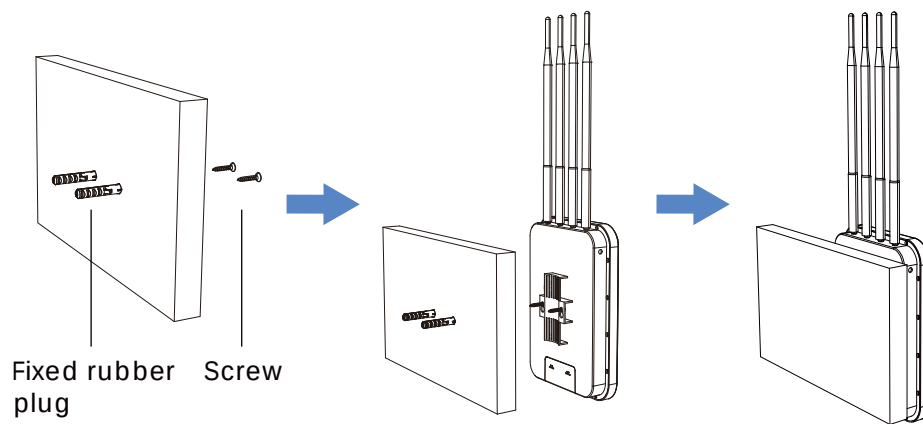
6.1 Pole Mounting

Place the assembled unit in front of the pole and run two stainless steel ties through the fixing bits of the bracket and secure to the pole.



Note: If you are installing in an environment that is subject to frequent lightning, it is recommended that you protect the unit from lightning by means of a grounding connection.

6.2 Wall Mounting

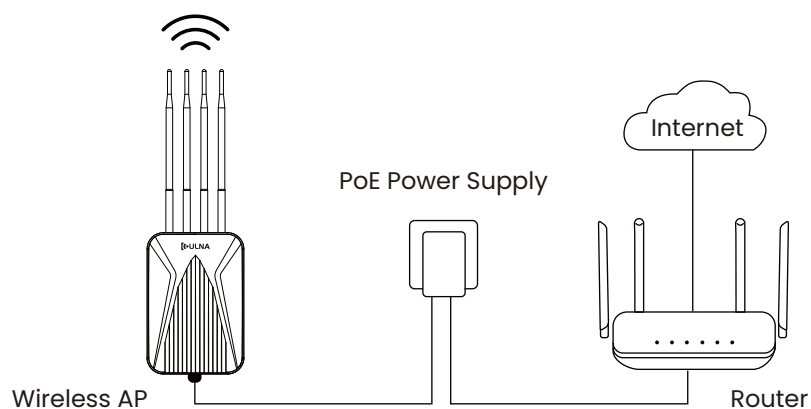


1. According to the holes on the back of the AP device, use a hammer or other tools to drill holes in the wall. Do not drive the nails all the way into the wall;
2. Align the hole on the back of the AP device with the nail, then hang it up;
3. Reinforcement can be carried out as appropriate.

7. Equipment Connection

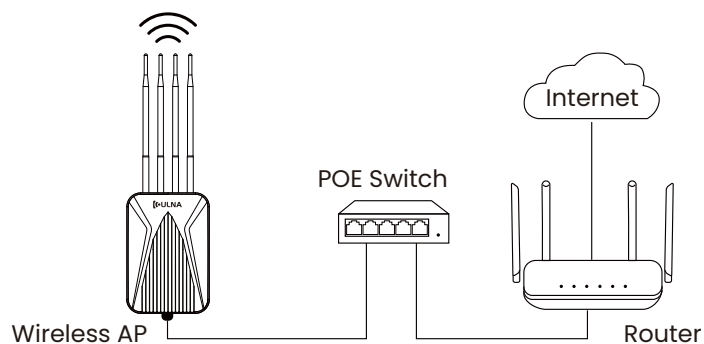
7.1 PoE Power Supply

7.1.1 24V/48V PoE Power Supply (Power Adapter)



1. Connect the WAN/LAN port of the device to the "PoE" port of the PoE power supply with a network cable;
 2. Connect the PoE power supply to a power outlet to power the device.
- Note:** This product is equipped with a 24V PoE power supply.

7.1.2 PoE Switch Power Supply



1. Connect the WAN/LAN port of the device to the power supply port on the PoE switch using a network cable;
2. Use a network cable to connect the PoE switch to the Internet.

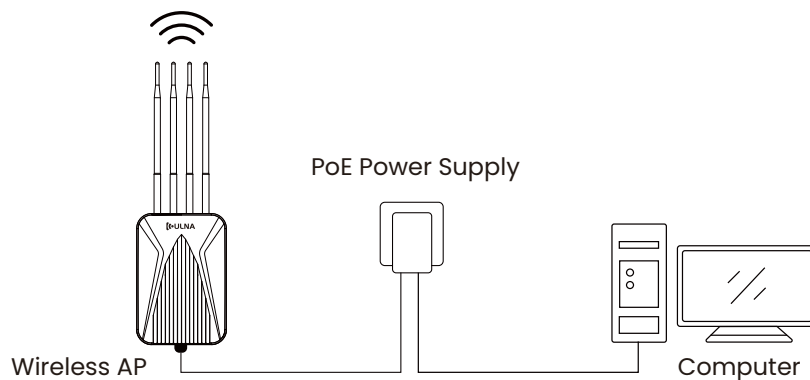
7.2 12V 1.0A DC Port Power Supply

1. Connect the device's DC port using the included power cord.
2. Plug the power adapter into a power outlet to supply power to the device.

8. Equipment Configuration

8.1 Connection Methods

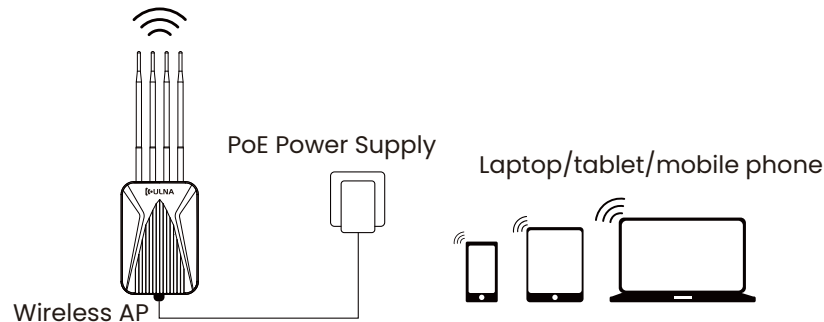
8.1.1 Wired Connection



1. Connect the WAN/LAN port of the device to the "PoE" port of the PoE power supply with a network cable; (Details can be found in Chapter 7 Equipment Connection)
2. Connect the "LAN" port of the PoE power supply to the wired network port of the configuration computer with a network cable and start configuring the device.

Note: : If the management page cannot be reached through the wired network, connect to the device's wireless network and continue with the wireless connection method.

8.1.2 Wireless Connection



1. Use a network cable to power the device through the power adapter; (Details can be found in Chapter 7 Equipment Connection)
2. After the device starts up, use the wireless network of your laptop/tablet/mobilephone to search for the wireless network of this product and connect to it, the default wireless network name 2.4G is "WIFI_XXXXXX" and 5.8G is "WIFI_XXXXXX_5G".

8.2 Device Login

Note: To log in to the device's backend in any of the three modes, you need to change the computer's IP address.

8.2.1 Change Computer IP Address

Steps 1

DC 9-24V Input	LAN2/WAN 1Gbps (PoE)	LAN1 1Gbps (PoE)	RST (15S)
ax 5.8G 1200Mbps	SSID: Repeater_XXXXXX		
ax 2.4G 600Mbps	Mode: AP/Repeater/WISP		
IP: 192.168.11.1	PoE 24V 1A		
LED display	0: ssid/pwd wrong/no link		
H: Wireless AP	3: link ok		
5: link RSSI good			
7: link RSSI better			
9: link RSSI super good			

Reset to reset,
hold down RST for
15 seconds to release

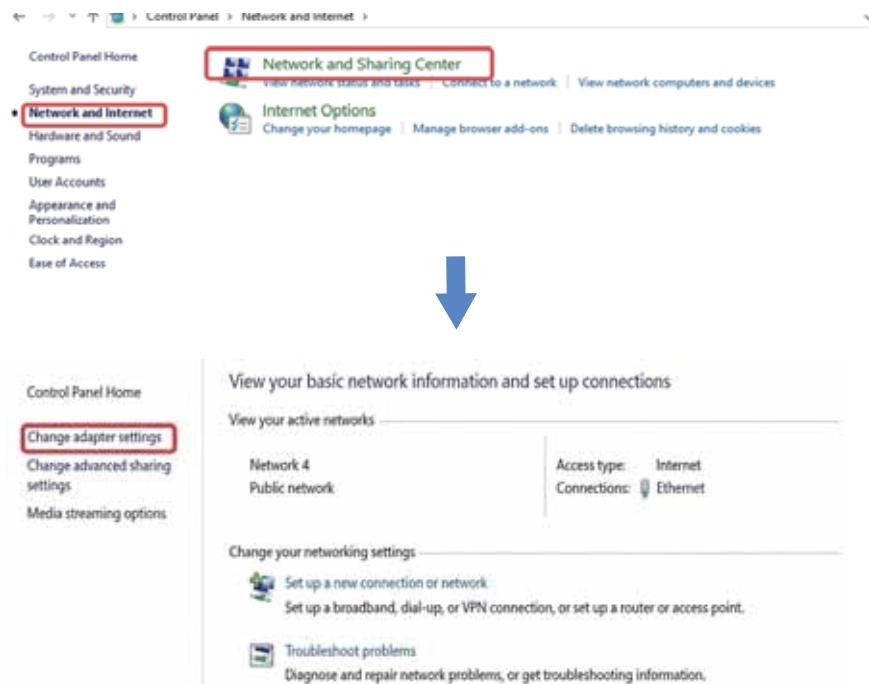
Confirm the IP address of the AP device

Steps 2



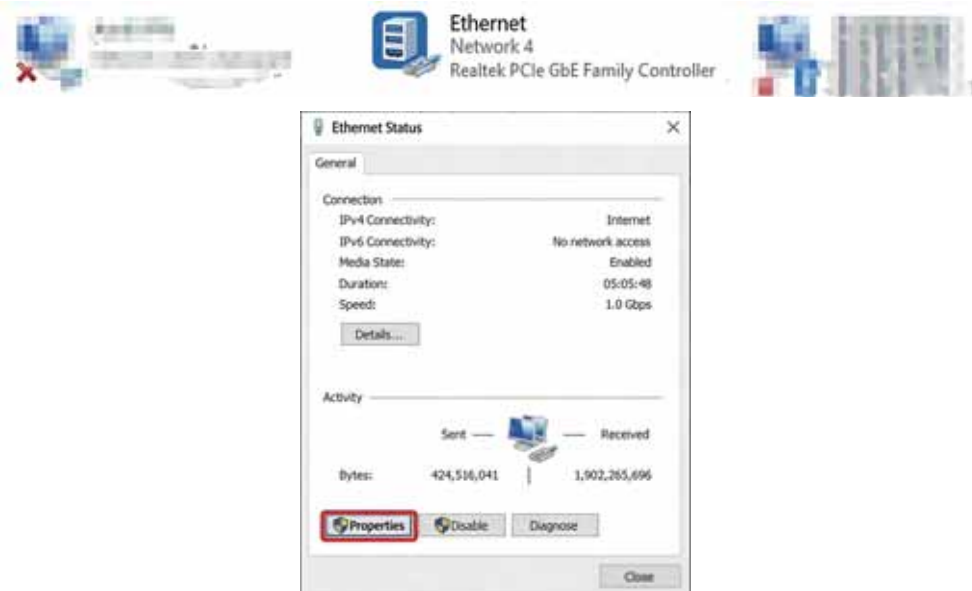
Open Control Panel from the "Start" menu.> Adjust your computer's settings>Click on Network and Internet

Steps 3



Click on Network and Sharing Center>click Change adapter settings.

Steps 4



Click on the active network connection (e.g., Ethernet) >select Properties.

Steps 5



Select "Internet Protocol Version 4 (TCP/IPv4)" , click "Properties."

Steps 6



Choose "use the following IP address".

The first three sections must be the same as the AP's first three sections of IP address. That is, the first three sections IP address must be 192.168.11. The fourth section can be any number other than 1.

Steps 7

Click OK to save the settings, then click Close to exit.

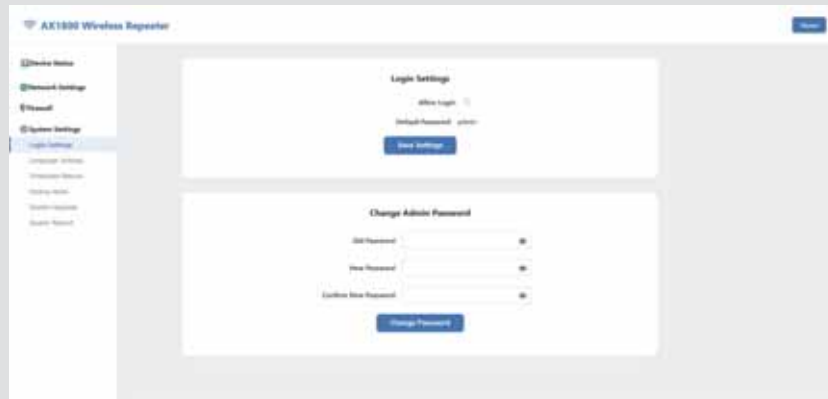
Steps 8



After changing the IP address, if you want to restore the original settings of your computer, simply select "Obtain an IP address automatically" in this interface.

8.2.2 Access the Device Management Page

1. Open the browser, enter the device's IP address "192.168.11.1" in the address bar and log into and setting page.



Reminder:

After logging into the settings interface, it is recommended to change the administrator password in "System Settings>Login Settings" and remember the new password. The new administrator password cannot be the same as "admin". When logging in again, please use the administrator password you set yourself, which is the password to enter the settings page, not for the WIFI connection.



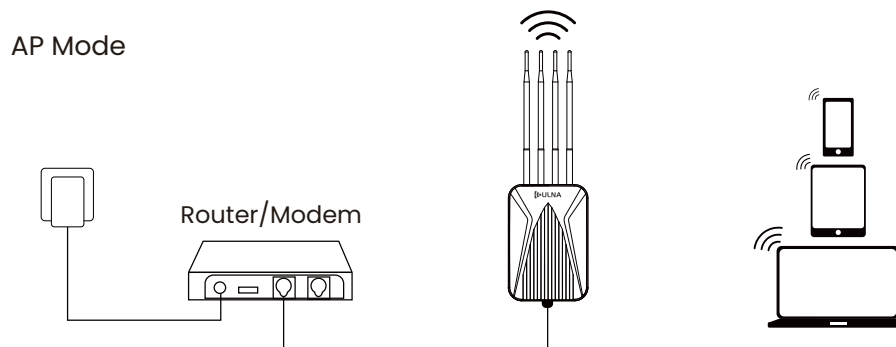
2. Enter "Quick Settings" and select working mode.

8.3 Mode Selection

8.3.1 AP Mode

• AP Mode Overview

In AP Mode, the device acts as a wireless access point connected to your existing router/modem via an Ethernet cable. It creates a new WiFi hotspot while extending network coverage – but all IP addresses are still assigned and managed by the connected router or modem, not by the extender itself.



• AP Mode Setup

1. Change the IP address and log in to the product management interface (Details can be found in Chapter 8, 8.2 Device login).
2. Select the internet access method and click "Advanced Settings".



3. Select encryption in the "2.4G WiFi Settings" and "5G WiFi Settings", and set the SSID and wireless password for 2.4G and 5G respectively.

The screenshot shows the web interface of an AX1800 Repeater. At the top, it says "AX1800 Repeater" and "Service Status". The main content area is titled "AP Settings". Under "2.4G WiFi Settings", there are fields for "WiFi Name" (set to "Repeater_2.4G"), "WiFi Password" (with a hint "Please input WiFi Password"), "Channel" (set to 1), and "Bandwidth" (set to 20 MHz). There are checkboxes for "Advanced Options" (Disabled, Hidden, and WPA3, with WPA3 selected). Below this is the "5G WiFi Settings" section, which has identical fields: "WiFi Name" (Repeater_5G), "WiFi Password", "Channel" (set to 36), "Bandwidth" (set to 80 MHz), and "Advanced Options" (Disabled, Hidden, and WPA3, with WPA3 selected). At the bottom of the settings panel are "Back" and "Next" buttons.

4. If you need to merge the SSID names of 2.4G and 5G, open the "Dual-band Combination" function, select encryption in the "Encryption" settings, and set the SSID and wireless password separately.

Reminder:

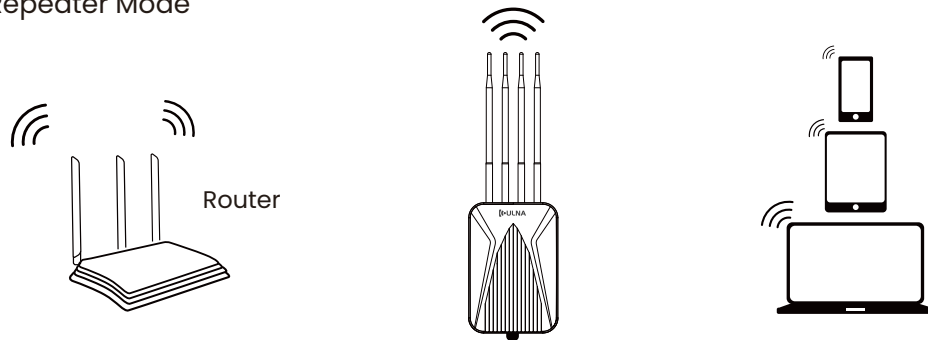
After enabling the "Dual-band Combination" function, the SSID names and wireless passwords for 2.4G and 5G are the same.

8.3.2 Repeater Mode

• Repeater Mode Overview

In Repeater Mode, the device wirelessly connects to your existing router's WiFi signal and rebroadcasts it to expand coverage area. It acts as a "bridge" between the main router and distant devices no Ethernet cable is required between the router and the extender.

Repeater Mode



• Repeater Mode Setup

1. Change the IP address and log in to the product management interface (Details can be found in Chapter 8, 8.2 Device login).
2. Select the internet access method and click "Advanced Settings".



3. After selecting the repeater mode, it will automatically enter the SSID scanning interface.



4. Select the SSID that needs to be connected, set the 2.4G and 5G extended SSIDs respectively, enter the relay password (i.e. the wireless password for selecting the SSID), and click "Apply".

Note: In the repeater mode, the distance between the device and the router, as well as the material and thickness of the obstacles between the device and the router, all affect the transmission of the signal.

9. Firmware Upgrade



If you need to update firmware, please proceed as the following steps:

1. Download the latest firmware file
2. Extract the firmware from the downloaded file.
3. Log in to "System Settings">"System Upgrade">"Choose file"

10. Product Precautions

1. Installation Environment

Ensure the device is installed in a well-ventilated, stable location away from direct sunlight, heat sources, or corrosive substances. When mounting outdoors, ensure all cable interfaces are properly sealed to maintain the IP67 waterproof rating.

2. Power Supply

The device supports standard 48V PoE (802.3af/at) power supply. Use only the included PoE adapter or a compliant PoE switch. Do not use non-standard power sources to avoid device damage.

3. PoE Cable Length

The maximum PoE cable length is 100 meters long (328 ft). Exceeding this distance may result in insufficient power supply and unstable network performance.

4. Antenna Installation

Ensure the four 8dBi omnidirectional antennas are firmly installed and oriented vertically for optimal signal coverage. Avoid placing antennas near metal obstructions that may interfere with wireless transmission.

5. Operating Temperature

The operating temperature range of the equipment is from -40°F to 131°F (-40°C to 55°C). Avoid prolonged exposure to temperatures outside this range to ensure optimal performance and longevity.

6. Lightning Protection

Although the device features built-in 15kV surge protection, it is recommended to install additional external lightning protection when deployed in areas prone to frequent thunderstorms for enhanced safety.

7. Network Configuration

Before deployment, configure the device in a controlled environment. The intuitive web-based interface allows for easy setup. Keep the administrator credentials secure to prevent unauthorized access.

8. Maintenance

Regularly inspect the device casing and cable connections for signs of wear, moisture ingress, or corrosion. Clean the surface with a dry cloth; do not use chemical solvents.

11. Troubleshooting / Q&A

Primary category	subcategory	Description	Root Cause	Solution
Network Issues	Network Connection Error	Wrong Cable Connection	Incorrect cable wiring sequence, wrong port insertion	1. Check the RJ45 crimping sequence to ensure compliance with standards; 2. Confirm the cable is plugged into the correct WAN/LAN port of the AP; 3. Replace with a qualified network cable for testing
	No Network Access	Wi-Fi signal is displayed, but no network access	1. No network input from the upper-level device to the AP; 2. Incorrect AP configuration, functions cannot start normally	1. Check if the upper-level router/switch network is normal and the cable connected to the AP is unobstructed; 2. Reconfigure AP parameters to ensure normal function startup
	SSID Name Issue	When operating in wireless repeater mode, the SSID names of 2.4G band, 5G band and main router are different	The product does not support Mesh function by default, and SSIDs of each band are independent in repeater mode	This product does not support Mesh function and cannot achieve unified SSID for multiple devices; if you need the same SSID, replace it with a Mesh-supported device
	Band Abnormality	Only 5GHz band works normally in Wi-Fi list, while 2.4GHz band continuously shows "No Internet Access" (reset invalid)	1. 2.4G band not enabled/configured incorrectly; 2. 2.4G channel interference	1. Log in to the management backend to confirm the 2.4G band is enabled and configured correctly; 2. Switch the 2.4G channel to avoid interference

Connection Issues	Connectivity Issue	Inadequate connection performance	1. Incorrectly relaying the upper-level 2.4G band in repeater mode; 2. Channel interference	1. Relay only the 5.8G band in repeater mode. 2. Change channel to avoid interference.
	Poor Connection Quality	Severe packet loss, slow speeds, and unusable connection after connecting to AX3000.	1. Incorrectly relaying the upper-level 2.4G band in repeater mode; 2. Channel interference; 3. Hardware failure	1. Relay only the 5.8G band. 2. Change channel to avoid interference. 3. Replace device if hardware fails.
	Device Stability Issue	Frequent disconnection and automatic restart	Unstable power supply	1. Replace PoE adapter. 2. Replace network cable to test power supply.
Configuration Issues	Configuration Compatibility Issue	After completing the basic repeater settings, is any additional operation required in "Advanced Mode"?	The new AP product architecture does not support this legacy configuration logic	Not applicable to new APs; no further operation required.
	Configuration Issue	Device fails to respond to time zone update settings	Time zone settings do not take effect without network connection	Connect AP to the network, then save time zone settings.

Others	Coverage/Performance Issue	Weak coverage range, actual coverage far below the specification, only suitable for use within a 50-foot radius	1. Incorrectly relaying the upper-level 2.4G band in repeater mode; 2. Channel interference	1. Relay only the 5.8G band in repeater mode. 2. Change channel to avoid interference.
	Hardware Quality Issue	Cracked rubber sealing ring	Individual production/transportation defects	Contact after-sales support for a replacement.
	Repeater Distance Issue	Is a 300-foot distance feasible in repeater mode? Is AP mode only feasible with wired connection or deployed wireless bridge equipment?	Limited transmission distance in repeater mode, long distance causes severe signal attenuation	1. Relay only 5.8G band. 2. Max repeater distance is 30m with no obstacles. 3. For 300ft (91m), use a wired or wireless bridge solution.

12. Service & Contact

Thank you for choosing the WiFi6 Outdoor Dual Band Wireless AP. Please read this manual carefully before use.

Customer Service: To help us better understand and resolve your issues more efficiently, please show us the following information when contacting us:

- Order number

1. Go to Your Orders.

2. Find the relevant product.

3. Click Order Details.

4. Locate the Order ID (starts with a number, e.g., 123-1234567-1234567).

- Product model (e.g., UAP6-1800)

- Pictures or video showing the issue

Customer Support Email: **support01@ulnastore.com**

Regulatory Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and

- (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with ISSED license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and

- (2) this device must accept any interference, including interference that may cause undesired operation.

CE FCC RoHS ISSED 
Made in China 

13. FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.