Outdoor Wireless Bridge User Guide

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CPE interface

| LED | PoE/WAN | RST | DC-12V | ON-OFF |

LED: Display the pairing number.

PoE/WAN: transmit data and connect to wired external network.
Reset: Press and release to switch the numbers, long press for 20 seconds to restore factory settings.

DC-12V: 12V DC power interface.

ON-OFF: Switch working mode, ON is client mode, OFF is AP mode.

1

2.Installation flow chart

Hardware connection-Set up your computer-Login management interface-Set up your CPE -Test wireless-Set up installation

3.Hardware installation

Way1

Use a network cable to connect theWAN to a PC, router or switch bason the network topology.

Way 2

Completed connection,push up to restore theCPE back cover.

Please prepare a long enough network cable to connectthe PoE adapter and CPE.Recommend to use a Category5 (or above) shielded network cable with a ground wire.

Place the CPE to the selected wallposition and adjust the CPE frontpanel orientation to be approximately the same as theselected direction.

Wall

Connect the WAN of the PoEadapter to the PC, router or switchbase on the network topology.

2

POE power supply mode
Use POE power module to supply power

Wireless AP interface

LED   PoE/WAN   RST   DC-12V   ON-OFF

Move switch

PoE   LAN
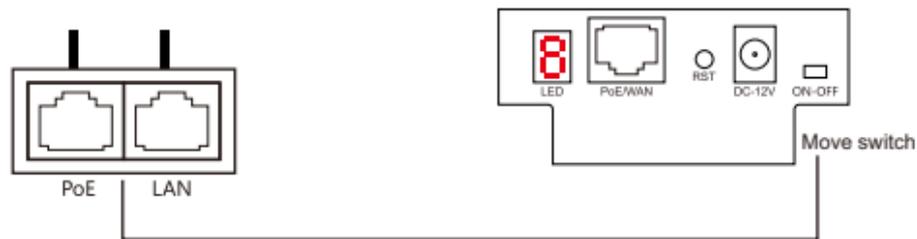
The PoE port of the POE power supply is connected to the WAN port of the outdoor CPE through a network cable, and the power supply is plugged into the socket to supply power to the CPE through the network cable. **Note** that the POE power supply needs to match the voltage and current supported by the CPE. Here the power supply support 24V 0.5A/1A (**model: CPE300**) or 48V 0.45A/0.6A (**model: CPE300P**).

4.Digital display bridge

1. The default digital display of the device is 0. Short press the Reset button to switch the digital display.
2. The default switch of the device is AP mode (right), slide the switch to the right to save the digital display number.
3. Turn the two devices into AP mode (right) and client mode (left) respectively, and the devices will be paired automatically.
4. After the pairing is successful, the IP of AP mode (right) is: 192.168.6.1, and the IP of client mode (left) is issued by the AP, as shown in the following figure.
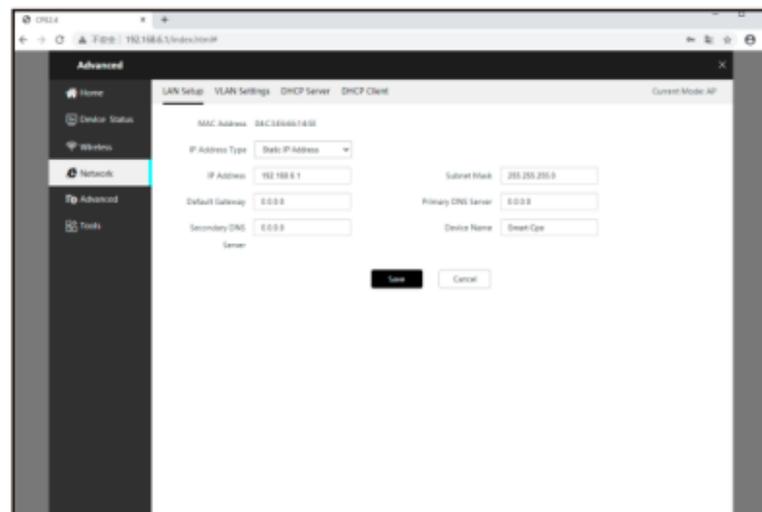
5.Log in to the CPE system

CPE management page login default IP address: 192.168.6.1 account/password: adminThe login interface can be switched between Chinese and English.

Wireless AP interface
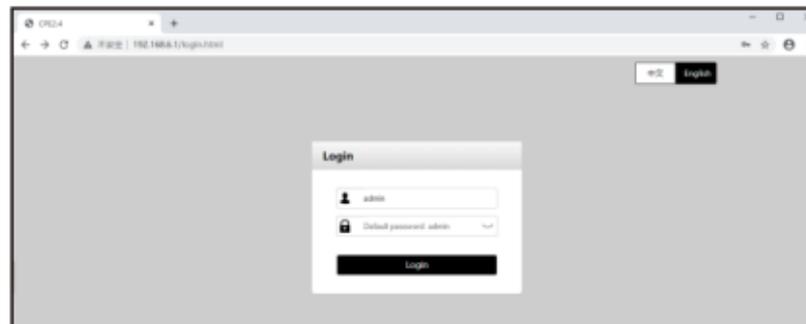
A variety of working modes are displayed by default after login
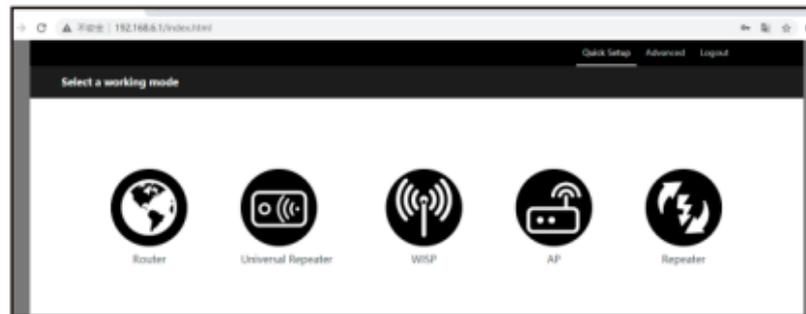
Routing mode: realize the router function, connect the WAN port to the modem (ADSL modem or fiber optic modem) dial-up Internet access or WAN port dynamic, static IP address Internet access.

Way1

Way2
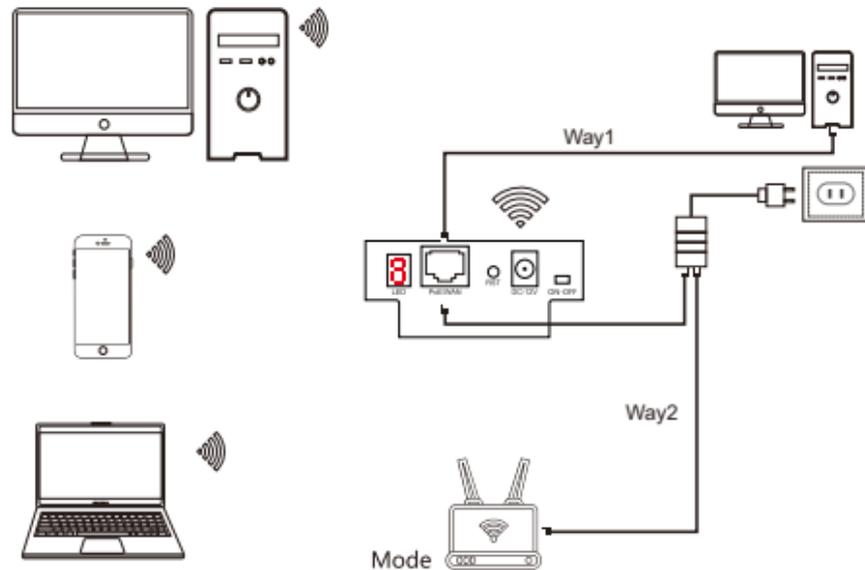
Mode

Routing mode: realize the router function, connect the WAN port to the modem (ADSL modem or fiber optic modem) dial-up Internet access or WAN port dynamic, static IP address Internet access.
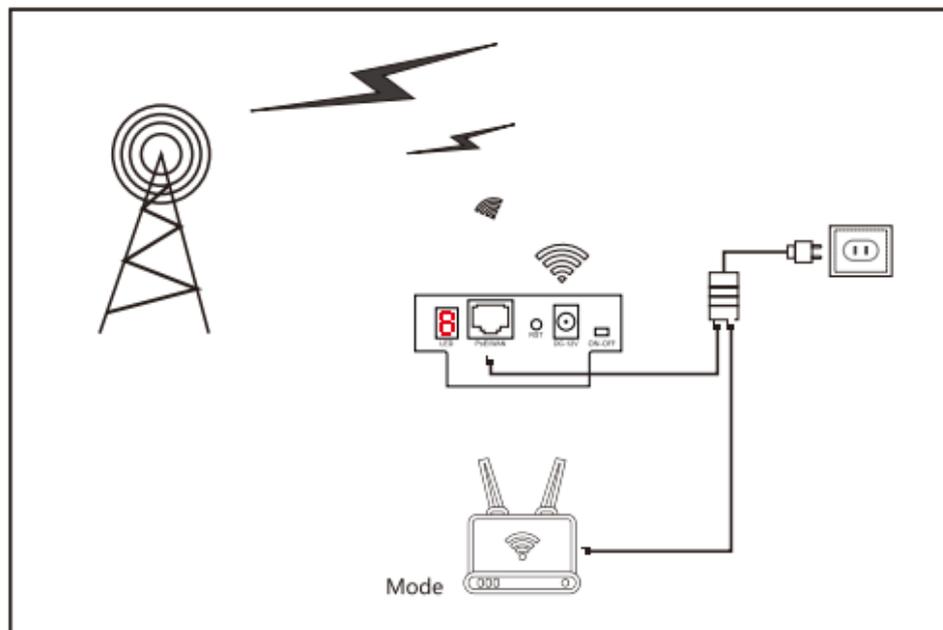
Mode

Relay mode: In this mode, it usually refers to a one-to-one situation. The wireless CPE at both ends of the bridge only communicates with the opposite wireless CPE at the other end. The device can add the other party's MAC address by scanning the available network. The encryption methods of both parties must be consistent.
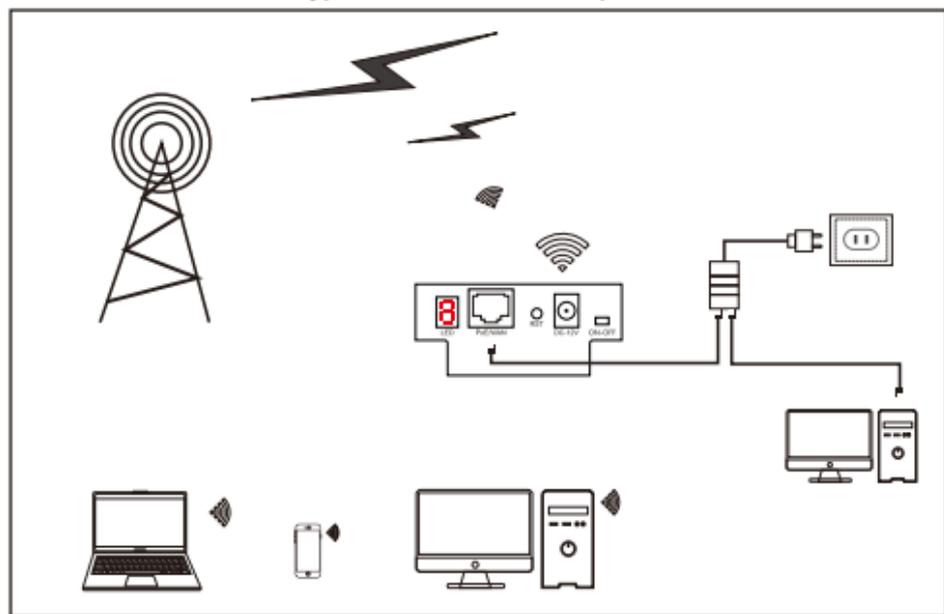
Working mode interface, you can choose advanced
settings and debug specific parameters

1. Equipment status

After logging in, the home page displays the current equipment status information of
the system, such as IP address, working mode, connection status, channel,
throughput, terminal information… Let the administrator judge the operation of the
CPE through the status information.

2.Wireless settings

2.1 Basic settings

This interface can modify the CPE country code, channel, SSID, power, encryption
method and other wireless information

Channel: Between adjacent devices, channels will interfere with each other, and
different channels need to be used.

2.2 Advanced settings

WMM: WMM is a wireless QoS protocol that is used to ensure that high-priority packets have the priority to
send rights, so as to ensure that voice, video and other applications have better service quality in wireless
networks. It is recommended to keep it on.

APSD: Automatic Power Save Delivery, automatic power saving mode. It is the WMM power saving
certification protocol of the Wi-Fi Alliance. After enabling WMM, enabling "APSD" can reduce the power
consumption of the bridge. Disabled by default.

Wireless preamble: It is a group of bits at the beginning of a data packet, and the receiver can synchronize
and prepare to receive actual data accordingly.

The default is long preamble, which can be compatible with some older client network cards in the network.
If you want to make the network synchronization performance better, you can choose a short preamble.

Signal receiving ability: used to adjust the signal receiving ability of the bridge. The higher the level, the
stronger the signal receiving capability of the bridge, and the more wireless signals scanned.

Beacon interval: Set the time interval for the bridge to send Beacon frames. Beacon frames are sent
periodically at specified time intervals to announce the existence of wireless networks. Generally speaking:
the smaller the interval, the faster the wireless client access to the bridge; the larger the interval, the higher
the efficiency of wireless network data transmission.

Fragment threshold: Set the fragmentation threshold of the frame.

The basic principle of fragmentation is to divide a large frame into smaller fragments, and each fragment is transmitted and confirmed independently. When the part of the frame power transmission needs to be re-sent, thereby improving the throughput of frame transmission.

In an environment with a high bit error rate, the fragmentation threshold can be appropriately lowered, so that if the transmission fails, only the unsuccessful part needs to be re-sent, thereby increasing the throughput of frame transmission.

In a non-interference environment, appropriately increasing the fragmentation threshold can reduce the number of frame confirmations and improve the throughput of frame transmission.
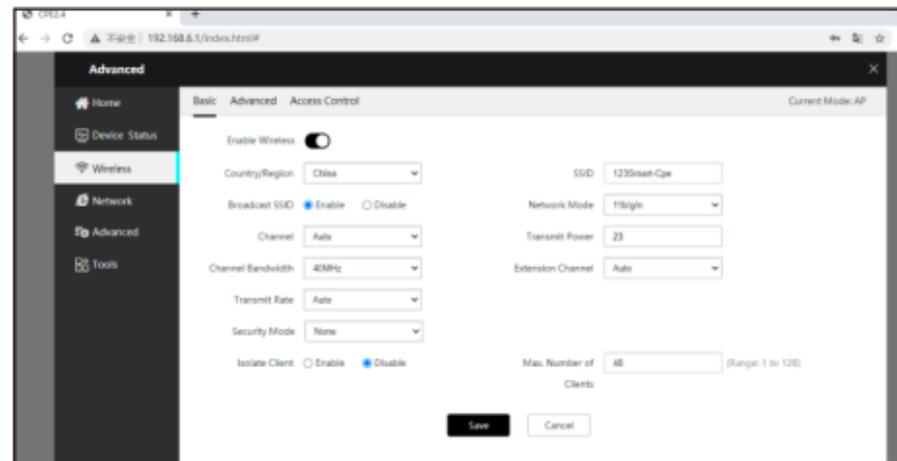
3.Network settings
3.1 LAN settings
Modify the IP mode of the device, automatically obtain or static IP.
3.2 VLAN settings
Divide multiple groups of CPE into different vlan segments, and separate each group of bridge data.
3.3 DHCP server
Turn on DHCP to issue an IP address to the terminal.
3.4 DHCP client list
CPE wireless bridging method, connecting the peer CPE, MAC address, IP address and other information of this equipment.
3.5 MAC authentication
Black and white list function, only allow a certain device to access, or only prohibit a certain device to access.

4. More settings

4.1 LAN port rate
WAN port and LAN port, 10M/100M full-duplex and half-duplex rates are optional, auto-negotiation by default.

4.2 Network diagnosis
Signal scanning: Scan the surrounding wifi signals and check the signal strength.
Ping: IP address ping packet test, you can choose the number of ping packets and bytes to verify the transmission effect.

4.3 Network Service
The device can be set to restart regularly to clear the cache.
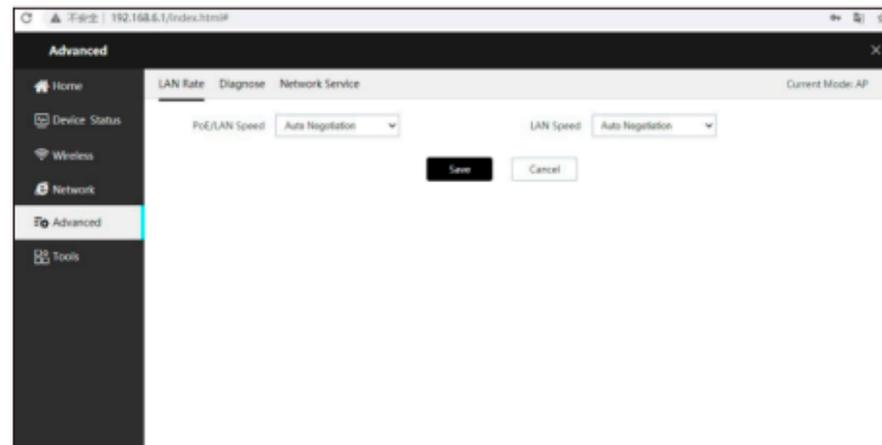
5. System Tools

5.1 System time
Network time and manual time, and time zone selection.

5.2 Equipment management
Operation options such as upgrade, reset, backup, and restart.

5.3 User Management
The access password of the WEB interface can be modified.

5.4 System Log
You can check whether the equipment is stable for a long time.nd bytes to verify the transmission effect.

4.3 Network Service
The device can be set to restart regularly to clear the cache.
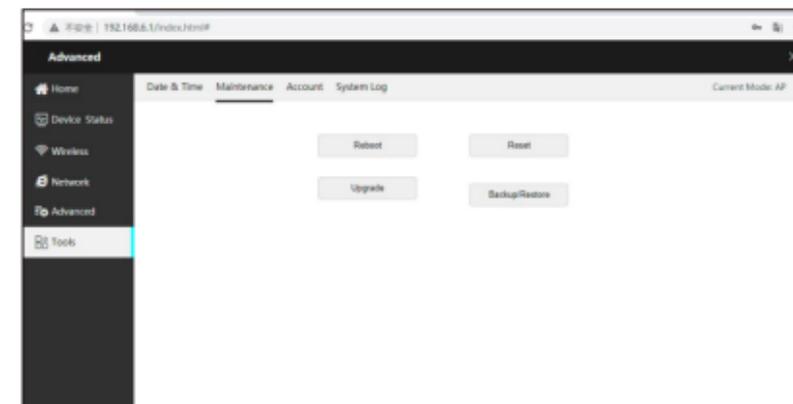
6.Equipment operation interface

■ **Accessories List**

 Stainless steel strip

 Network cable (white)

 Power adapter

 Network cable (white)

■ **Interface Description**
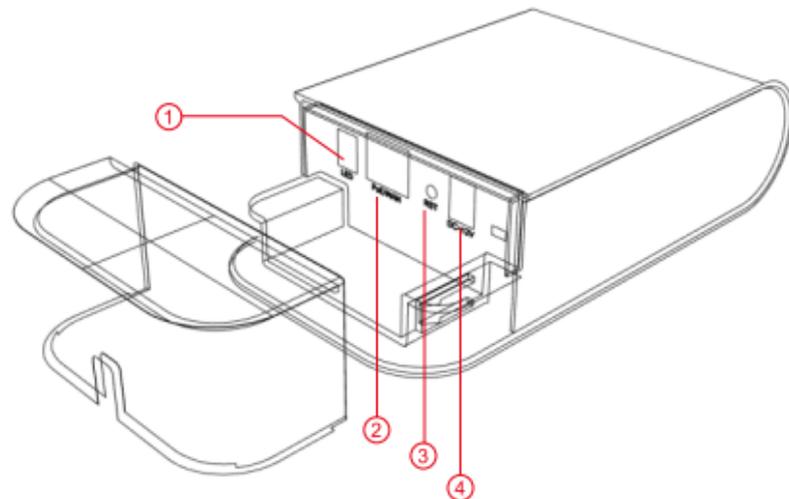
① LED indicator—Wireless bridge status.

② PoE/WAN port—PoE power supply and data transmission.

③ Reset port—Press for 20 seconds and release to restore factory settings.

④ DC port—Wireless bridge power supply, free choice of PoE or DC power supply.

■ Installation method
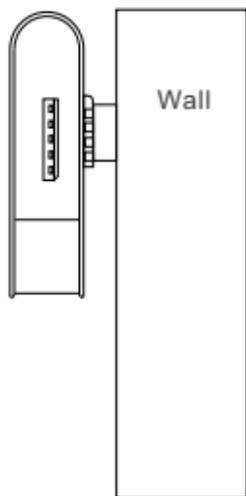
① Wall-mounted   ② Bracket   ③ Pole

Wall
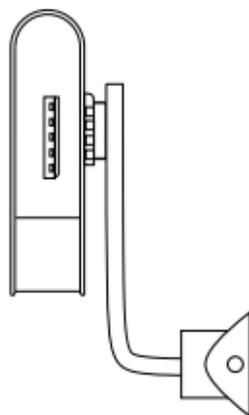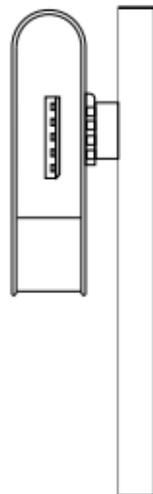
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