





**5.8G 20Km Outdoor CPE
Quick Installation Guide**

Overview

This document describes the installation, configuration and use of outdoor wireless transmission equipment.

Symbol Agreement

The following symbols may appear in this document, and they represent the following meanings.

Symbol	Description
 Danger	Indicate there is a potential high risk that could cause the casualties or serious injuries if not avoided.
 warning	Indicate there is a potential moderate or low risk that could cause the minor or moderate injuries if not avoided.
 Notice	Indicate there is a potential risk that could cause damage of device, data loss, performance degradation or other unpredictable results if ignore the warnings.
 ss	The additional information of the straight matter, which is the emphasis and supplement of straight matter.

Operating Requirement

- * Do not place and install the equipment in direct-sunlight places or near heating equipment
- * Do not install the equipment in a damp, dusty place.
- * Please install the equipment in a stable place and prevent the product from falling down.
- * Do not drop or splash the liquid on the device, and make sure that no items filled with liquid are placed on the device to prevent the liquid from flowing into the device.
- * Please install the equipment in a well-ventilated place. Do not block the air vents of the equipment.
- * The device can only be used within the rated input/output range.
- * Don't disassemble the equipment.
- * Please transport, use and store equipment within the allowed humidity and temperature range.
- * Please do use the standard power adapter.

1. Line Connection

The line connection method is shown in figure 1-1. Please refer to table 1-1 for the interface description

Figure 1-1 Connection Diagram

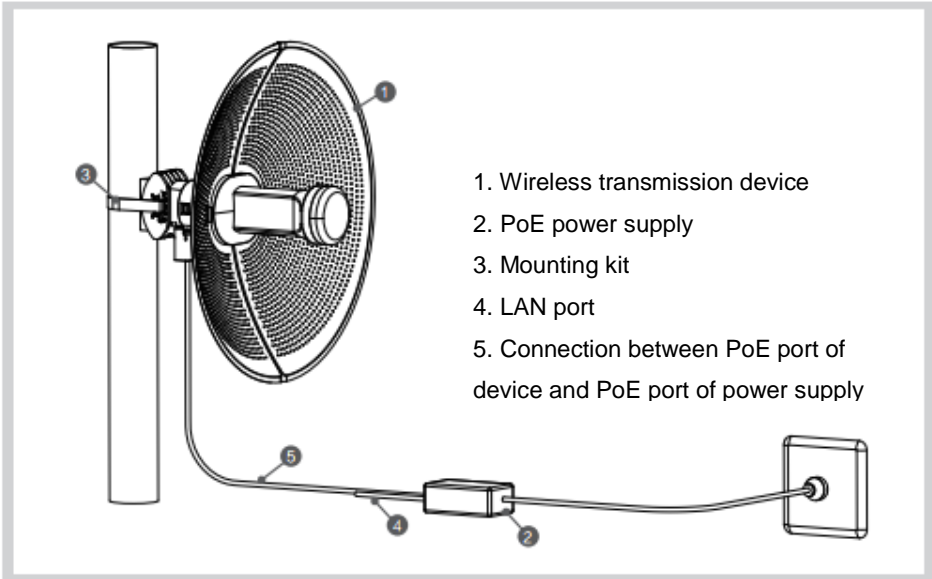


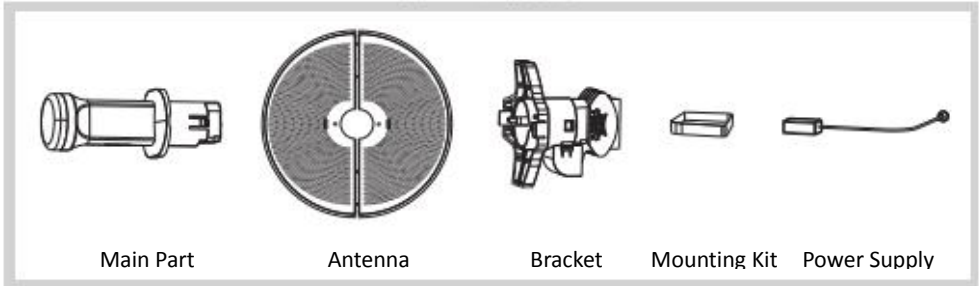
Table 1-1 Interface Description

Interface Type	Interface Name	Description
RJ45	PoE	Connected with PoE port in PoE power supply, provide both the power and data.

2. Installation Step

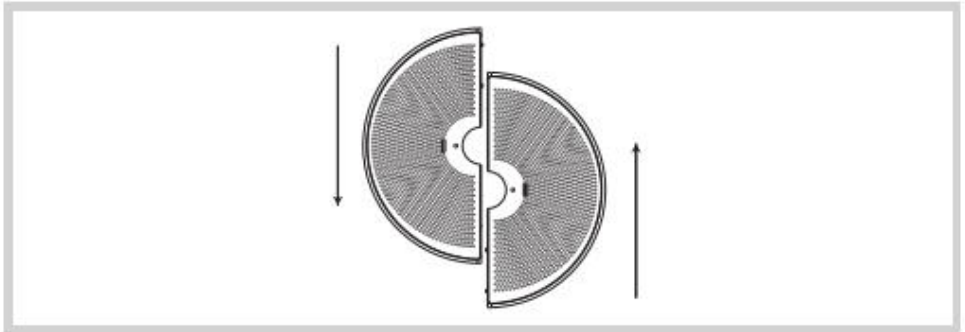
After getting the equipment, please check whether there is obvious damage to the equipment appearance and confirm whether the items are consistent with the list, as shown in figure 2-1:

Figure 2-1 Packing List



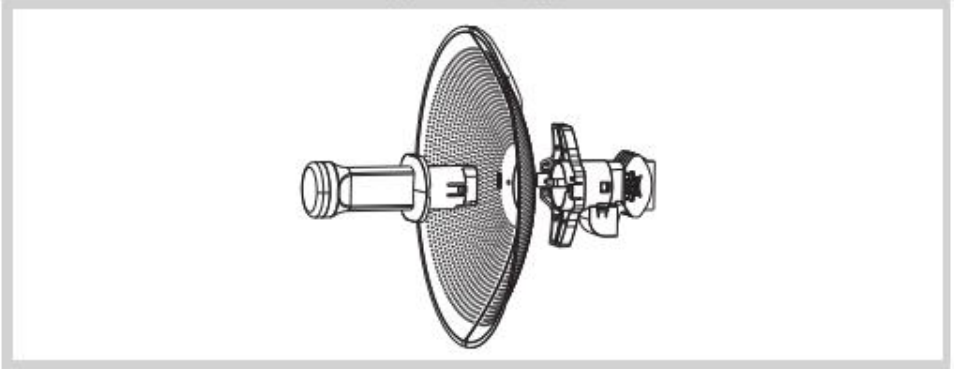
Splice the two antennas in the direction of the Figure 2-2.

Figure 2-2 Antennas Splicing



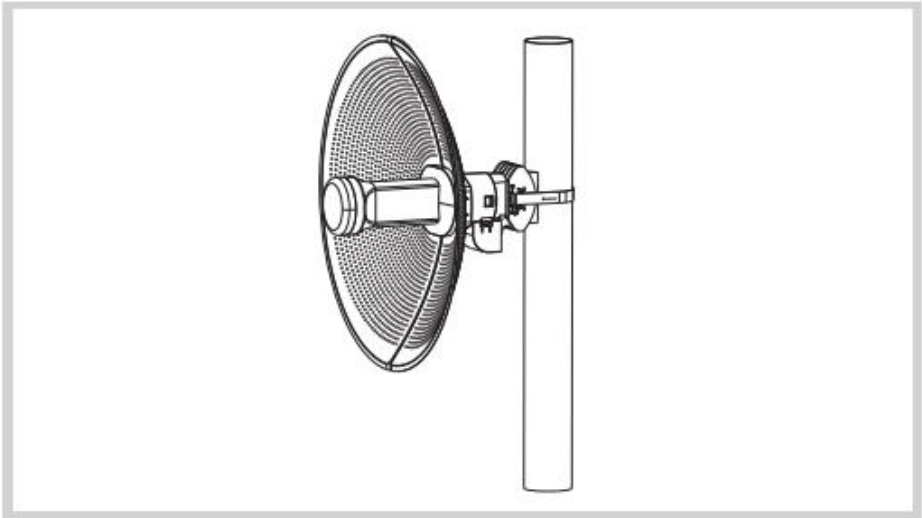
After the antenna splicing is completed, the antenna is fixed on the base at the bottom through the bayonet, and the main part is then stuck in from the front of the antenna, as shown in Figure. 2-3

Figure 2-3 Device Splicing



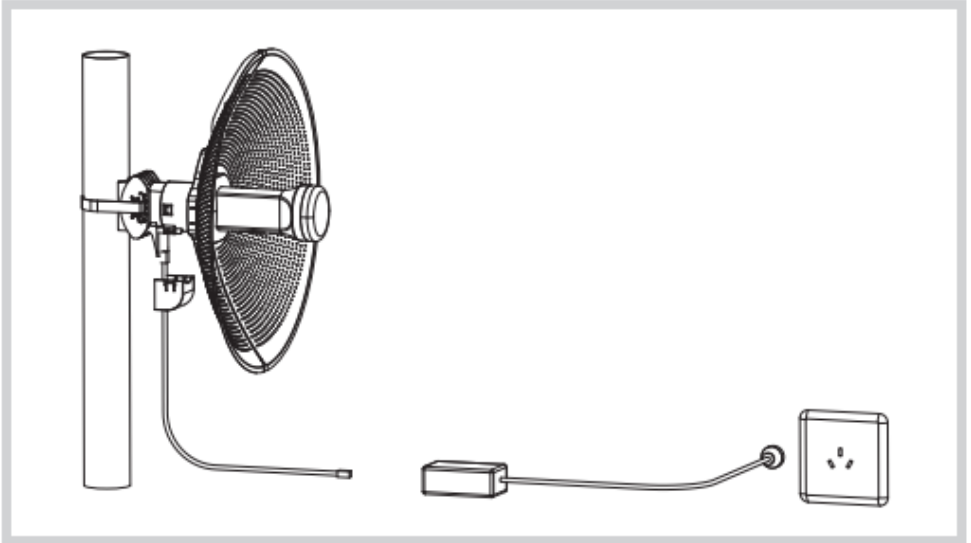
After the device splicing, install the device on the column through the hoop, as shown in Figure 2-4.

Figure 2-4 Fixture



After the device is fixed, open the buckle under the base, connect the network cable to the PoE port of the device, and fasten the buckle on the card. Connect the other end of the network cable to the PoE port of PoE power supply, as shown in Figure. 2-5. After the device is energized, connect other devices (such as cameras, etc.) to the LAN port of PoE power supply, and then it can be used.

Figure 2-5 Power On



3. Configuration

3.1 Precondition

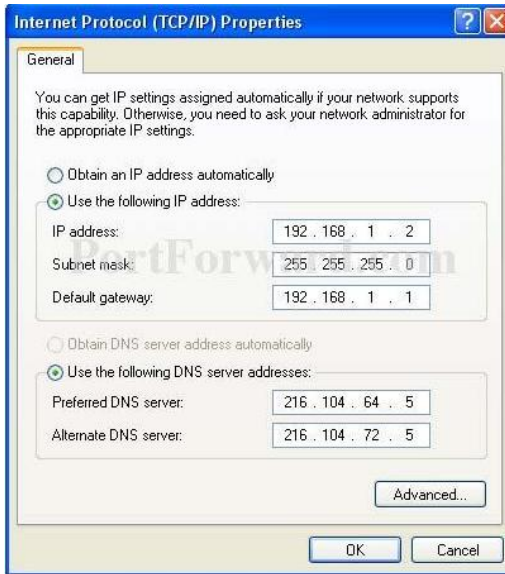
Referring to the above two steps, connect the LAN port on the PoE power supply of the device to the PC cable port and energize it.

3.2 Configuration Step

With the following steps to configure the device, the end user or bridge device can connect and communicate after the configuration is completed.

Step 1. The IP address configured for PC is the unused 192.168.1.X address in LAN, and X is any integer except 36 in 2-253, such as 192.168.1.2. The setting diagram is shown in Figure 3-1.

Figure 3-1 PC IP Setting

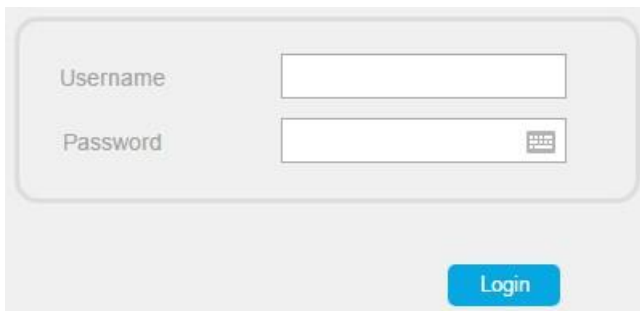


Step 2. Use the browser to login the device. Please refer to table 3-1 for login information.

Item	Parameter
IP	192.168.1.36
User Name	root
Password	admin

Step 3. The login page is shown in figure 3-2

Figure 3-2 Login



Step 4. Click the wizard bar, and the page is as follows. The user can modify the device password, device name, and interface language, as shown in figure 3-3.

Figure 3-3 Wizard System Page

Wizard System

This wizard help set the basic parameters of the system, the country code is China model.

Device Name Language

[Previous](#) [Next](#) [Finish](#)

Step 5 Click next to set the network operating mode of the device.

- Please use bridge mode when used as a normal access point, and modify LAN IP to the unique one and avoid collisions, as shown in figure 3-4.

Figure 3-4 Bridge Mode

Wizard Network

Mode	<input type="text" value="Bridge"/>
LAN IP	<input type="text" value="192.168.1.36"/>
IPv4 netmask	<input type="text" value="255.255.255.0"/>
IPv4 gateway	<input type="text"/>
DNS servers	<input type="text" value="114.114.114.114"/>

[Previous](#) [Next](#) [Finish](#)

- Used as a wireless router, the WAN protocol should be set according to network conditions, as shown in figure 3-5.
- Note: When choosing PPPoE, enter the operator-supplied dial-up account and password in the corresponding items (connect the public port and LAN

port of the device PoE power supply directly after the completion of step 6 configuration). The alternate address can be used to access the device page when the device PPPoE dialing fails. Please set the same network segment as PC.

Figure 3-5 PPPoE

Wizard Network

Mode	Router
LAN IP	192.168.1.36
IPv4 netmask	255.255.255.0
WAN Protocol	PPPoE
PAP/CHAP username	
PAP/CHAP password	
Fallback IPv4 address	192.168.2.1
IPv4 netmask	255.255.255.0

Previous Next Finish

- When selected the DHCP client, the device will get the IP address automatically (after the configuration of step 6, connect the public port and LAN port of the device PoE power supply directly). The alternate address can be used to access the device page when the device cannot obtain the IP address. Please set the same network segment as PC, as shown in figure 3-6.

Figure 3-6 DHCP Client

Wizard Network

Mode	Router
LAN IP	192.168.1.36
IPv4 netmask	255.255.255.0
WAN Protocol	DHCP client
Fallback IPv4 address	192.168.2.1
IPv4 netmask	255.255.255.0

Previous Next Finish

- When choosing a static address, please contact the network administrator for the information of configured IP address, subnet mask, gateway, DNS and other information (connect the LAN port of the public port and the PoE power of the device directly after completing the configuration in step 6), as shown in figure 3-7.

Figure 3-7 Static Address

Wizard Network

Mode	Router
LAN IP	192.168.1.36
IPv4 netmask	255.255.255.0
WAN Protocol	Static address
IPv4 address	192.168.2.1
IPv4 netmask	255.255.255.0
IPv4 gateway	
DNS servers	114.114.114.114


Previous

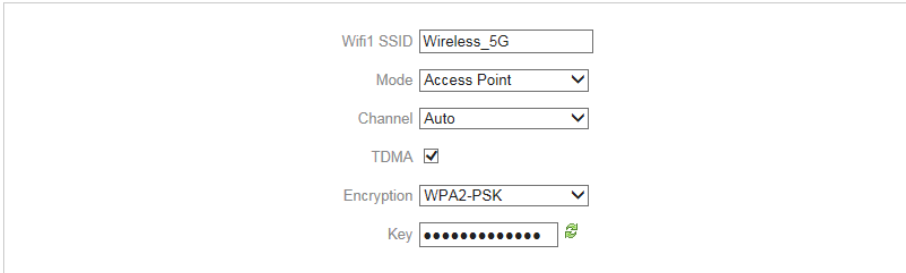
Next

Finish

Step 6. Click 'next', this page is used to set the equipment of the wireless mode. When choosing 'access point' in wireless mode setting, the SSID is used to select the connection for the client, it is recommended to set the frequency to 'auto' and wireless encryption to 'wpa2-psk', the default key is 1234567890abc. It is recommended to change SSID and password accordingly. Please enter the same password after the end user connecting to the configured SSID, as shown in figure 3-8.

Figure 3-8 Access Point

 Wizard Wireless




Wifi1 SSID

Mode

Channel

TDMA

Encryption

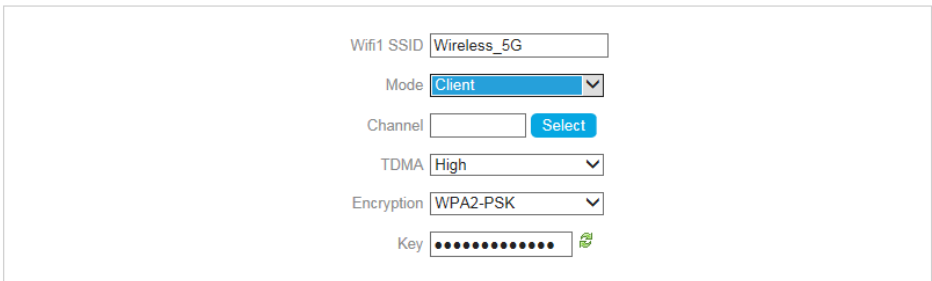
Key 

[Previous](#) [Next](#) [Finish](#)

Step 7. Configure the client. When choosing the 'client' in the wireless mode setting, as shown in figure 3-9, Click "select" on the right of "frequency" to open the frequency limit function and select the corresponding frequency, as shown in figure 3-10, enabling the client to quickly associate the access point. The default setting is locking all frequencies.

Figure 3-9 Client

 Wizard Wireless




Wifi1 SSID

Mode

Channel [Select](#)

TDMA

Encryption

Key 

[Previous](#) [Next](#) [Finish](#)

Figure 3-10 Frequency Selection

<input type="checkbox"/> 4920 MHz	<input type="checkbox"/> 4925 MHz	<input type="checkbox"/> 4930 MHz	<input type="checkbox"/> 4935 MHz	<input type="checkbox"/> 4940 MHz	<input type="checkbox"/> 4945 MHz
<input type="checkbox"/> 4950 MHz	<input type="checkbox"/> 4955 MHz	<input type="checkbox"/> 4960 MHz	<input type="checkbox"/> 4965 MHz	<input type="checkbox"/> 4970 MHz	<input type="checkbox"/> 4975 MHz
<input type="checkbox"/> 4980 MHz	<input type="checkbox"/> 4985 MHz	<input type="checkbox"/> 4990 MHz	<input type="checkbox"/> 4995 MHz	<input type="checkbox"/> 5005 MHz	<input type="checkbox"/> 5010 MHz
<input type="checkbox"/> 5015 MHz	<input type="checkbox"/> 5020 MHz	<input type="checkbox"/> 5025 MHz	<input type="checkbox"/> 5030 MHz	<input type="checkbox"/> 5035 MHz	<input type="checkbox"/> 5040 MHz
<input type="checkbox"/> 5045 MHz	<input type="checkbox"/> 5050 MHz	<input type="checkbox"/> 5055 MHz	<input type="checkbox"/> 5060 MHz	<input type="checkbox"/> 5065 MHz	<input type="checkbox"/> 5070 MHz
<input type="checkbox"/> 5075 MHz	<input type="checkbox"/> 5080 MHz	<input type="checkbox"/> 5085 MHz	<input type="checkbox"/> 5090 MHz	<input type="checkbox"/> 5095 MHz	<input type="checkbox"/> 5100 MHz
<input type="checkbox"/> 5105 MHz	<input type="checkbox"/> 5110 MHz	<input type="checkbox"/> 5115 MHz	<input type="checkbox"/> 5120 MHz	<input type="checkbox"/> 5125 MHz	<input type="checkbox"/> 5130 MHz

Note:

- When deploying multiple access points, select automatic channels or manually configure to different channels to avoid inter-device interference.
- In the same LAN, please configure the client and the corresponding access point device to have the same network name and key.
- Disable the TDMA function for common terminals such as laptops, mobile phones and wireless cameras.
- For centralized device management, please enable CAPWAP function of the device and configure accordingly.

Specification

Wireless Technology	Protocol	IEEE802.11 a/n/ac
	Operating Frequency	5180~5320M,5745~5825MHz (Support extend of 4920~6100MHz)
	Antenna	23dBi directional antenna
	Output Power	27dBm
	Receiving Sensitivity	-96dBm@6Mbps, -85dBm@MCS0
	Transmission Rate	11n: 300Mbps 11ac: 867Mbps
Hardware	Operating Voltage	48V PoE+
	Network Port	1*100/1000M Base-TX (Cat.5/5E,RJ-45) network port
	Operation Temperature	-40℃ ~ 65℃
	Storage Temperature	-40℃ ~ 80℃
	Operation Humidity	5%~95%RH Non-condensing
	Weight	0.9kg
	Dimension	Φ372mm×241mm
Software	Encryption Way	WPA-PSK/WPA2-PSK
	Networking Mode	Routing / Bridge
	Wireless Mode	access point, client, WDS access point, WDS client
	Security Mechanism	IP/MAC address filtering, hidden network name
	Network Protocol	TCP/UDP/ARP/ICMP/DHCP/HTTP/NTP
	ACK timing	Support (automatically adapt to changes in transmission distance)
	System	NTP , Syslog , SNMP , AC
	Configuration Management	Support web configuration, AC remote configuration and SNMP management
	Update	Support firmware web update and AC remote update
	Flexible Bandwidth Configuration	10M/20M/40M/80MHz