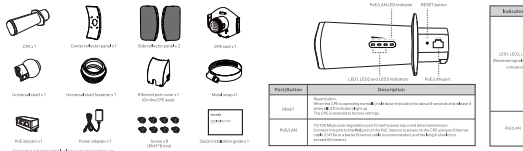
Tenda

Quick Installation Guide

5GHz 23dBi 11ac Outdoor CPE

O8

Package contents



For product in Netherlands, please go to www.tenda.nl.

Get to know your device

Port/Button	Description
RESET	Reset button When the CPE is operating normally, hold down the button for about 8 seconds and release it when all LED indicators light up. The CPE is restored to factory settings.
PoE/LAN	10/100 Mbps auto-negotiation port for both power injection and data transmission. Connect this port to the **PoE** port of the PoE injector to power on the CPE, using an Ethernet cable (CAT5E or a better Ethernet cable is recommended, and the length should not exceed 50 meters).

Indicator	Status	Description
LED1, LED2, LED3 (Ethernet signal strength indicators)	Solid blue Blinking	The CPE is successfully bridged or connected to other devices. The CPE is trying to bridge or connect to other devices. Blinking: The CPE works in **Client**, **Universal Repeater** or **WISP** mode. Each LED indicator is set with a received signal strength value, which is the minimum signal strength required for the CPE to bridge or connect to other devices. The connection quality through the sensor of those indicators. The indicator values are shown below. RSSI(dBm): -90,-80,-70 Signal strength: Weak Medium Strong The signal strength can be adjusted in the **Wireless > Advanced** page in the web UI of the CPE.
	Off	No device is connected to the CPE via wireless or cable, or the received signal strength value is lower than the minimum value (-90 dBm by default). Or any LED indicator is going out.
PoE/LAN	Solid blue	The CPE is powered on properly, but no cable is being transmitted over the port.
	Blinking	The CPE is powered on properly, and data is being transmitted over the port.
	Off	The CPE is not powered on or not powered on properly.

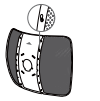
Assemble and install the CPE

Tips: You may have completed the steps in section Get to know your device and other steps in section Assemble and install the CPE.

Step 1: Assemble the CPE

❶ Align the two holes on one side of the corner reflector panel with the 2 projections (tabs) on the right side of the cable reflector panel. Slide the corner reflector panel down to the opposite direction and then hold it firmly in the shown area.

❷ Repeat ❶ to fix another side reflector panel.



❸ Remove the Ethernet port cover from the CPE seal. Align the tabs of the CPE seal with the slotted edges of the corner reflector panel and cable reflector panels, and four hooks of the CPE seal with the four holes of the corner reflector panel.

❹ Press the CPE seat to fix it on the corner reflector panel.

Note

To prevent the deformation of the reflector panels and decreasing of bridging quality, DO NOT fasten the hooks and holes and put them in a dark or a humid place while and after fixing the CPE seat.

This adjustment shown above is prohibited.

❺ Fix the mast on point with the included screws.

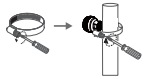
❻ Insert the CPE into the CPE seat from the front side of the center reflector panel.

Step 2: Install the CPE

Tips:

Before installation, please set up the CPE according to the application scenario you need.

❶ Use screwdriver to open the metal strap by taking the screw counterclockwise. Put the screw and shaft into the universal shaft fastener and fix the universal shaft and universal shaft fastener on the pole using the metal strap. Connect the fastened of the metal strap and use the screw where is adjacent to right tightness.

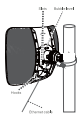


❷ Direct the CPE seat or the previous shaft fastener, and screw the screw of shaft fastener to fix the CPE. Ensure an appropriate tightness for you to adjust the orientation of the CPE later.

❸ Connect the CPE and PoE injector using an Ethernet cable. Insert one end of the cable into the **PoE/LAN** port of the CPE and use Ethernet cable. The **PoE/LAN** LED indicator of the CPE lights up.

❹ Adjust the orientation of the CPE to the horizontal with the bubble level. When the LED1, LED2 and LED3 indicators of **PoE/LAN** port are lit in blue, it indicates that the bubble is horizontal.

❺ Fasten the screws and shaft fastener and fix the Ethernet port cover.



Scenario 1: CCTV surveillance or point to point data transmission

Tips: At least two CPEs are required for bridging.

1. Set up the CPEs (AP mode + Client mode)

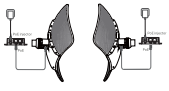
Option 1: Automatic bridging (recommended)

Tips

Ensure the two CPEs are in factory settings next to each other.

Step 1: Use Ethernet cables to connect the **PoE/LAN** port of the CPEs to the **PoE** port of the PoE injectors.

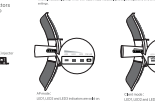
Step 2: Use the included power adapters to connect the PoE injectors to power sources. The **PoE/LAN** LED indicators of the two CPEs light up.



Then, LED1, LED2 and LED3 indicators of the two CPEs blink fast. When the LED1, LED2 and LED3 indicators of one CPE light solid on and those of the other CPE blink, it means the automatic bridging is possible.

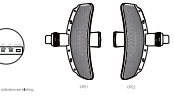
Tips

The automatic bridging is based on factory CPEs in factory settings and is applicable to scenarios of PtP & Bridging, including **Client+WISP**, **Universal Repeater**, **Client+AP**, **Client+Universal Repeater**, **Client+Bridge**, **AP+Client**, **WISP+Client**, **AP+WISP**, **Bridge**, **Universal Repeater**, **Client+Bridge**, **AP+Universal Repeater**, **AP+Bridge**, **Universal Repeater+Bridge**, **Client+Universal Repeater+Bridge**, **AP+Universal Repeater+Bridge**.



Option 2: Manual bridging

Step 1: Place two CPEs next to each other.

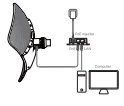


Step 2: Power on CPE1 and connect it to a computer.

❶ Use an Ethernet cable to connect the **PoE/LAN** port of the CPE1 to the **PoE** port of the PoE injector.

❷ Use the AC power adapter to connect the PoE injector to a power source. The **PoE/LAN** LED indicator of CPE1 lights up.

❸ Use an Ethernet cable to connect the **LAN** port of the PoE injector to a computer.



Step 3: Set CPE1 to **AP** mode.

❶ Start a web browser on the computer and visit **192.168.2.1**. Enter the login user name and password and click **Login**.

Tips

If the login page does not appear, please refer to Q11 in FAQ.

❷ Select **AP**, and click **Next**.

❸ Customize your **SSID** (WiFi name) and **Key** (WiFi password), select a **Channel**, a **Security Mode** (WPA2-PSK is recommended), and a **Transmission Algorithm**. Then **Save**.

Record the **SSID** and **Key** for later setup.

❹ Click **Save**, and wait until the CPE reboots automatically to activate the settings.

Step 4: Set CPE2 to **Client** mode.

❶ Repeat **Step 2** to power on the CPE2 and connect it to a computer.

❷ Start a web browser on the computer and visit **192.168.2.1**. Enter the login user name and password and click **Login**.

Tips

If the login page does not appear, please refer to Q11 in FAQ.

❸ Select **Client**, and click **Next**.

❹ Select the **SSID** of CPE1, which is **Tenda_224456** in this example, and click **Next**.

❺ Enter the **Key** of CPE1, and click **Next**.

❻ Set the **IP** address to an unused one belonging to the same network segment as that of CPE1. For example, if the IP address of CPE1 is 192.168.2.1, you can set the device IP address to 192.168.2.X (X range from 2 to 254). Then click **Next**.

❼ Click **Save**, and wait until the CPE reboots to activate the settings.

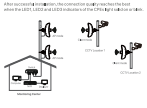
When the LED1, LED2 and LED3 indicators of CPE1 light up solid on, and those of CPE2 blink fast, it means the bridging is ongoing. When it succeeds and the DHCP service of the two CPEs are enabled, it automatically.

2. Application scenario

❶ Connect the CPEs with the LED1, LED2 and LED3 indicators solid on (AP mode + the transmitting signal) to the switch which is connected to an NVR (Network Video Recorder).

❷ Connect the CPEs with the LED1, LED2 and LED3 indicators blinking (Client mode + the receiving signal) and PoE cameras as a wireless network to connect to PoE cameras.

After successful connection, the connection quality can reach the best when the LED1, LED2 and LED3 indicators of the CPEs light solid on blue.



Scenario 2: Wireless ISP hotspot access

1. Set up the CPE

Step 1: Power on the CPE and connect it to a computer.

❶ Use an Ethernet cable to connect the **PoE/LAN** port of the CPE to the PoE port of the PoE injector.

❷ Use the included power adapter to connect the PoE injector to a power source.

❸ Connect a computer to the **LAN** port of the PoE injector.

Step 2: Set the CPE to **WISP** mode.

❶ Start a web browser on the computer and visit **192.168.2.1**. Enter your user name and password and click **Login**.

Tips

If the login page does not appear, please refer to Q11 in FAQ.

❷ Select **WISP**, and click **Next**.

❸ Select the **SSID** of the ISP (Internet Service Provider) hotspot, which is **Tenda_123456** in this example, and click **Next**.

❹ Enter the password for the ISP hotspot in the **Key** box, and click **Next**.

❺ Select the **Internet Connection Type** of your ISP hotspot. **PPPoE** is used for dial-up broadband. If you select the PPPoE, enter the username and password provided by your ISP, and click **Next**.

❻ Customize the **SSID** (**WiFi Name**), select a security mode (WPA2-PSK is recommended), customize a **Key**, and click **Next**.

❼ Set an **IP** address belonging to different network segment as that of your ISP hotspot. For example, if the IP address of your ISP hotspot is 192.168.2.1, you can set the CPE IP address to 192.168.3.X (X ranges from 1 to 254 excluding 2). Then click **Next**.

❽ Click **Save**, and wait until the CPE reboots to activate the settings.

When LED1, LED2, and LED3 indicators of the CPE are blinking, the CPE is connected to the ISP hotspot successfully.

2. Application scenario

❶ Place the CPE over the roof.

❷ Connect the **LAN** port of the PoE injector to the WAN port of your wireless router. The connection quality reaches the best when the LED1, LED2 and LED3 indicators of the CPE shine.

Appendix FAQ

Q1. I cannot log in to the web UI of the CPE by entering 192.168.2.1.

Q2. How to check that the CPE is better than the best connection solution?

Q3. After the bridging succeeds, the LED1, LED2 and LED3 indicators do not light up solid on blue. What should I do?

Q4. Why the bridging distance between the CPEs is shorter than the specified?

Q5. Why the bridging speed is not as expected?

Q6. Why the bridging is not stable?

Q7. Why the bridging is not ended?

Q8. Why the bridging is not ended?

Q9. Why the bridging is not ended?

Q10. Why the bridging is not ended?

Q11. Why the bridging is not ended?