Tenda

Quick Installation Guide

5GHz 1667Mbps Tri-Band Gigabit Outdoor CPE

O6

Package contents

- AX5 x 1
- Power cord x 1
- Mounting accessories x 1 (PoE/PD box)
- PoE injector x 1
- Quick Installation Guide x 1

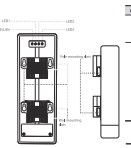
For product or function details, please go to www.tendacn.com.

Get to know your device

Ports/button

Item	Port/button	Description
①	Reset	Reset button. Used to restore the CPE to factory settings. Power off the CPE, press and hold the Reset button for about 8 seconds, release the Reset button, then power on the CPE.
②	DC power jack	DC power jack. Connects to the power adapter to the port for power supply.
③	Grounding terminal	Grounding terminal. Connect the grounding cable to keep the CPE safe from lightning protection.
④	PoE/LAN	PoE/LAN port. Connects to a PoE injector or PoE switch to receive power and data transmission. Connects to a router to keep the CPE online. Power supply is recommended to connect the port to the PoE injector's power supply.

LED indicators/slots



LED indicator/Slot	Status	Description
PoE/LAN	Blinking	The CPE is powered on and is connecting to other devices.
	Solid	The CPE is powered on and has a strong connection to other devices.
	Off	The CPE is not powered on or not powered on properly.
LED1, LED2, LED3 and LED4 (signal strength indicator)	Solid	The CPE is powered on and has a strong connection to other devices. ● Solid on: The CPE works in AP, Repeater, P2MP or Router mode. ● Solid green: The CPE works in Client mode and has a strong signal. ● Solid yellow: The CPE works in Client mode and has a medium signal. ● Solid red: The CPE works in Client mode and has a weak signal. You are advised to move the CPE closer to the AP to ensure stable Internet access.
	Blinking	The CPE is searching for signals. ● Blinking green: The CPE works in Client mode and is searching for a strong signal. ● Blinking yellow: The CPE works in Client mode and is searching for a medium signal. ● Blinking red: The CPE works in Client mode and is searching for a weak signal.
	Off	The CPE is not powered on or not powered on properly.
WPS indicator	Blinking	Press the WPS button on the Wireless - Advanced page to the client.
	Off	The WPS function is disabled.
Reset indicator	Solid	Press the Reset button for about 8 seconds, release the Reset button, then power on the CPE.
	Off	The CPE is not powered on or not powered on properly.
Grounding indicator	Solid	The CPE is properly grounded.
	Off	The CPE is not properly grounded.

Scenario 1: CCTV surveillance or point to point data transmission

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

Only ● signal icon(s) can be supported in bridging.

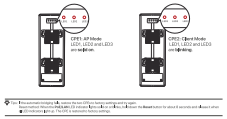
Option 1: Automatic bridging (recommended)

- Automatic bridging is available in Office/Home setting.
- Power-on: automatic bridging and full throughput between paired CPEs in factory settings and need nearby.

Peer-to-peer bridging

Step1: Place two CPEs in factory settings next to each other.
Step2: Use the included power cord to connect the PoE/LAN port of the CPE to the PoE port of the PoE injector.
Step3: Use the included power cords to connect the PoE injectors to power sources. The PoE/LAN LED indicators of the two CPEs light up.

About 1 min later, when the LED1, LED2 and LED3 indicators of one CPE light solid on and three of the other CPE keep blinking, the automatic bridging succeeds. After the bridging succeeds, the DHCP server of the CPE is disabled automatically. The IP address of the CPE working in AP mode remains 192.168.2.1, and the IP address of the CPE working in Client mode is changed into 192.168.2.2.



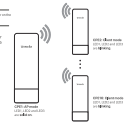
Note: If the environment is changed, for example, the two CPEs have been powered on again.

Peer-to-multiple peers bridging

Note: If the environment is changed, for example, the two CPEs have been powered on again.

Step1: Choose any two CPEs, then perform **Peer-to-peer bridging.**
Step2: Within 10 min after peer-to-peer bridging is success, put other CPEs near the CPE working in AP mode (LED1, LED2 and LED3 are lighting), and power them on.

About 1 minute later, if the LED1, LED2, and LED3 of these CPEs keep blinking, the bridging succeeds.
After the bridging succeeds, the DHCP servers of the CPEs are disabled automatically. The IP address of the CPE working in Client mode will change into 192.168.2.2. You can visit www.tendacn.com to download the CPE management software and install it on your computer to change the IP addresses in batches.

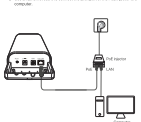


Option 2: Manual bridging

Step1: Place two CPEs next to each other.

Step2: Power on CPE1 and connect it to a computer.

- Use an Ethernet cable to connect the PoE/LAN port of the CPE1 to the PoE port of the PoE injector.
- Use the included power cord to connect the PoE injector to a power source. The PoE/LAN LED indicator of CPE1 lights up.
- Connect the Ethernet cable to connect the LAN port of the PoE injector to a computer.



Step3: Set CPE1 to **AP** mode.

- 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 **Q1** in **FAQ**.

- Select **AP**, and click **Next**.

- Customize your **SSID** (WiFi name) and **Key** (WiFi password), select a **Channel**, a **Security Mode** (WPA-PSK/WPA2-PSK recommended), and an **Encryption Algorithm**. Click **Next**. Record the **SSID** and **Key** for later setup.

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

Step4: Set CPE2 to **Client** mode.

- Perform **Step 1** to power on the CPE2 and connect it to a computer.
- Start a web browser on the computer and visit **192.168.2.1**. Enter the login user name and password and click **Login**.

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

- Select the **SSID** of CPE1, which is **Tenda_123456** in this example, and click **Next**.

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

- 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 this device's IP address to 192.168.2.31 (ranges from 2 to 254). Then click **Next**.

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

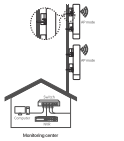
When the LED1, LED2 and LED3 indicators of CPE1 light solid on, and three of CPE2 keep blinking, the manual bridging succeeds. After the bridging succeeds and the DHCP servers of the two CPEs are disabled automatically.

2.Install the CPEs

Pole-mounting is used for illustration here.

- Choose the desired, open location for installation.
- Thread the two plastic straps through the pole-mounting slots on the backside of the CPE, and attach the CPE onto the pole as firmly as possible. Adjust the CPE's position and direction, and tighten the straps to fix the CPE.
- Connect the PoE injector to a power source and to the PoE port to the PoE/LAN port of the CPE using an Ethernet cable.
  The PoE/LAN LED indicator of the CPE lights up.
- Connect the CPEs with the LED1, LED2 and LED3 indicators solid on (AP mode + Repeater mode) and to the switch which is connected to an NVR (Network Video Recorder).
- Connect the CPEs with the LED1, LED2 and LED3 indicators blinking (Client mode + the receiving end) to IP cameras or a switch which is connected to IP cameras.

After successful installation, the connection quality reaches the best when the LED1, LED2 and LED3 indicators of the CPEs light solid on or off.

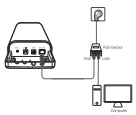


Scenario 2: Wireless ISP hotspot access

1. Set up the CPE

Step1: Power on the CPE and connect it to a computer.

- Use an Ethernet cable to connect the PoE/LAN port of the CPE to the PoE port of the PoE injector.
- Use the included power cord to connect the PoE injector to a power source. The PoE/LAN LED indicator of CPE lights up.
- Connect a computer to the LAN port of the PoE injector.



Step2: Set the CPE to **WISP** mode.

- 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 **Q1** in **FAQ**.

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

- Select the **SSID** of the **ISP**'s Internet Service Provider's hotspot, which is **Tenda_123456** in this example, and click **Next**.

- Enter the password for the **ISP**'s hotspot in the **Key** box, and click **Next**.

- Select the **Internet Connection Type** of your **ISP**'s hotspot. **PPPoE** is used for illustration here. Enter the PPPoE user name and password provided by your **ISP**, and click **Next**.

- Customize the **SSID** (WiFi Name), select a **Security Mode** (WPA2-PSK is recommended), a cipher rule (**Key**), and click **Next**.

- Set the IP address to an unused one belonging to a different network segment as that of the **ISP**'s hotspot. For example, if the IP address for the **ISP**'s hotspot is 192.168.23.1, you can set this device's IP address to 192.168.2.31 (ranges from 2 to 254 and **Key** is 7 to 63). Then click **Next**.

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

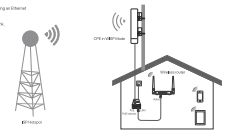
When LED1, LED2, and LED3 indicators of the CPE keep blinking, the CPE is connected to the **ISP**'s hotspot successfully.

3.Install the CPE

Pole-mounting is used for illustration here.

- Place the CPE near the wall.
- Thread the two plastic straps through the pole-mounting slots on the backside of the CPE, and attach the CPE onto the pole as firmly as possible. Adjust the CPE's position and direction, and tighten the straps to fix the CPE.
- Connect the PoE injector to a power source and to PoE port to the PoE/LAN port of the CPE using an Ethernet cable. The PoE/LAN LED indicator of the CPE lights up.
- Connect the LAN port of the PoE injector to the WAN port of your wireless router.

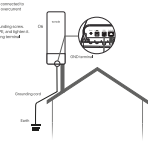
The connection quality reaches the best when the LED1, LED2 and LED3 indicators of the CPE blink.



Grounding

Connect the GND terminal of the CPE to a grounding terminal connected to the earth via a lug, to protect the CPE from overvoltage and overcurrent caused by lightning.

- Connect one side of the grounding cable to the GND terminal of the CPE.
- Connect the grounding screw to the GND terminal of the CPE, and tighten it.
- Connect the other side of the grounding cord to the grounding terminal connected to the earth via a lug.



FAQ

Q1: I cannot log in to the web UI of the CPE by entering 192.168.2.1. What should I do?

A1: Try the following methods:

- Ensure that the CPE is connected to a power source and your computer properly.
- Ensure that the IP address of the computer is set to 192.168.2.0 (ranges from 2 to 254 are) is unused.
- Restore the CPE to factory settings, and try again.

Q2: How to reset the CPE ?

A2: Note: Resetting the CPE deletes all settings, and you need to configure it again.

Method 1: When the **PoE/LAN** LED indicator lights solid on or blinks, hold down the **Reset** button on the CPE for about 8 seconds until the PoE/LAN LED indicator lights up. The CPE is restored to factory settings.

Method 2: Log in to the web UI of the CPE, choose **Tools**> **Maintenance**, and click the **Reset** button.

Q3: How to check that the CPE is under the best connection status?

A3: Try the following methods:

Method 1: Observe the LED indicators of the CPE. The connection quality reaches the best when the LED1, LED2 and LED3 indicators of the CPE light solid on or off.

Method 2: Log in to the web UI of the CPE with the default IP address(i.e. 192.168.2.1), check the bridging data and choose **Status**> **Wireless Status**.

Stronger signal strength >=-60 dBm is better than <=-70 dBm (less background noise >=90 dBm is better than <=85 dBm), and fast transmit/receive speed. Best is better bridging signal.

Q4: The automatic bridging fails. What should I do?

A4: Try the following methods:

- Power-on to bridging: If the peer-to-peer bridging fails, restore the two CPEs to factory settings, and try again.
- Power-on to multi-peers bridging: After peer-to-peer bridging succeeds, ensure that the next CPEs are powered on within 10 minutes.
- Move to bridge: If initial bridge within 20 minutes after peer-to-peer bridging succeeds, reset them and try again.
- Beyond 20 minutes after peer-to-peer bridging succeeds, refer to **Option 2: Manual bridging** to set the two CPEs to Client mode, and then connect them to the wired network of the CPE whose LED1, LED2, and LED3 are solid on.

Q5: After the bridging succeeds, the LED1, LED2 and LED3 indicators do not light up or only some of them do. What should I do?

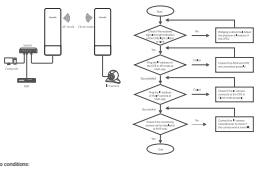
A5: Try the following methods:

- Ensure that the distance between the CPEs is within the normal range.
- Move the CPEs to an elevated location at the same height with few obstacles nearby.
- Make slight direction adjustment of the CPEs by moving it vertically and horizontally. Change the direction with an interval of 15 ~ 20 s each time in order to observe the changes of LED1, LED2 and LED3 indicators until the best signal is received.

Q6: After the bridging succeeds, there is no display of the scenes mentioned by IP cameras at the NVR side. What should I do?

A6: Try the following methods:

- Ensure that IP cameras are working normally, and connected properly.
- Ensure that the computer, NVR and IP cameras are in the same network segment, and the NVR config.addon function is enabled (contact sales).
- If the IP cameras can be scanned but cannot be added at the NVR side, ensure that the **Transparent Bridge** function is enabled and the IP camera is already in the addition (white) state.
- If the IP cameras cannot be scanned at the NVR side, please refer to the following procedure to solve the issue.



FC

FCC Statement

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 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.

Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment should be installed and operated with minimum distance 20cm between the device and your body.

Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To avoid possible eye damage, the user should not look at the front of the antenna from a close distance while any other antenna is transmitting.

Operating frequency: 5150~5250MHz, 5725~5850MHz

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

CE

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

This equipment should be installed and operated with a minimum distance 20cm between the device and your body.

The marketing agent used as disconnect device, the disconnect device shall remain readily accessible.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

Declaration of Conformity

Hereby, SHENZHEN TENDA TECHNOLOGY CO., LTD. declares that the radio equipment type O6 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.tendacn.com/en/service/declaration.html

Operating Frequency: EU:5150~5250MHz,5725~5850MHz

EIRP Power Max.: 22.99dBm

EIRP Power Density: EU:23.00dBm/MHz

EIRP Power Max.: 36.99dBm

Software Version: V1.0.0.10

CB

Caution

Attention: Risk of Explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Input: 12Vdc/2A

Output: 24~48V,0.5A

Output: 24~48V,0.5A

200, 0.5A/cm²

Manufacturer: SHENZHEN HENGTONGDA NETWORK TECHNOLOGY CO., LTD.

Address: Floor 1-2, Building A, Tenda Technology Co., Ltd., No.6 Keji 2nd Road, Nanshan District, Shenzhen, China

WEEE

RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.

User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.

analog Temperature: +50°C to -40°C

Operating Humidity: 10% to 90% RH, non-condensing

EUDETTA, this product can be used in the following countries:

Technical Support

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