

# User Guide

Wireless Outdoor CPE



The Smartest Network Device



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# About This Guide

This guide contains information for introduction and setup of TOTOLINK Wireless Outdoor CPE series. Please read this guide carefully before operation.

When using this guide, please notice that feature of the product may vary slightly depending on your location, language and Internet service provider. All screenshots, images, parameters and descriptions documented in this guide are used for demonstrations only.

## Package Contents :

Please open the Gift-box carefully, it should contain:

- ◆ TOTOLINK CPE \*1
- ◆ Passive PoE Box\*1
- ◆ 24V Power Adapter \*1
- ◆ User Guide\*1
- ◆ TOTOLINK Flyer \*1
- ◆ Ethernet Cable \*1
- ◆ Strips \*2

If there is any accessories broken or missing, please contact local retailer as soon as possible.

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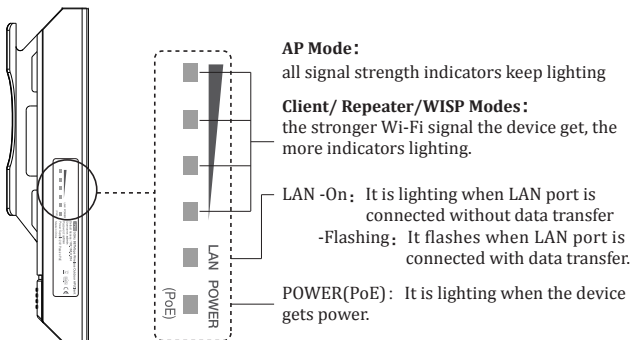
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# Introduction

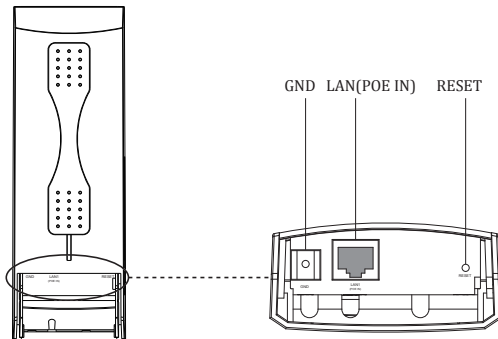
## 1. Overview

TOTOLINK Wireless Outdoor CPEs are designed to provide cost-effective solution for outdoor long range Wi-Fi coverage. With built-in polarized antennas, high power output and multiple working modes, TOTOLINK CPEs are used extensively in many applications. Powered by Passive PoE also makes the network cabling more easy and flexibly. Meanwhile, the professional structural design allows them suitable for any kind of severe environments, an ideal choice for outdoor Wi-Fi transfer over long distance.

## 2. LED Indicators

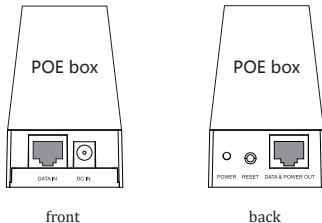


### 3. Ports and Buttons



Ports and Buttons	Description
GND	This GND port is used to connect electrical ground for ESD and lightning protection.
LAN ( POE IN )	This RJ45 Port is used to connect PoE box for both power supply and data transfer.
RESET	Press this RESET button for more than 5 seconds, the device will restored to factory default settings and reboot automatically.

## 4. Passive PoE Box

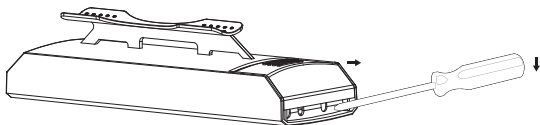


Ports and Buttons	Description
DATA IN	This RJ45 port is used to connect PC for data input
DC IN	The DC IN socket is where you will connect the power adapter.
POWER	Power indicator, it is lighting when power on
RESET	Press the RESET button for more than 5 seconds, TOTOLINK CPE will restore to factory default settings.
DATA & POWER OUT	This RJ45 port is used to connect TOTOLINK CPE for data and power transfer.

# Hardware Installation

## 1. Connection and Installation

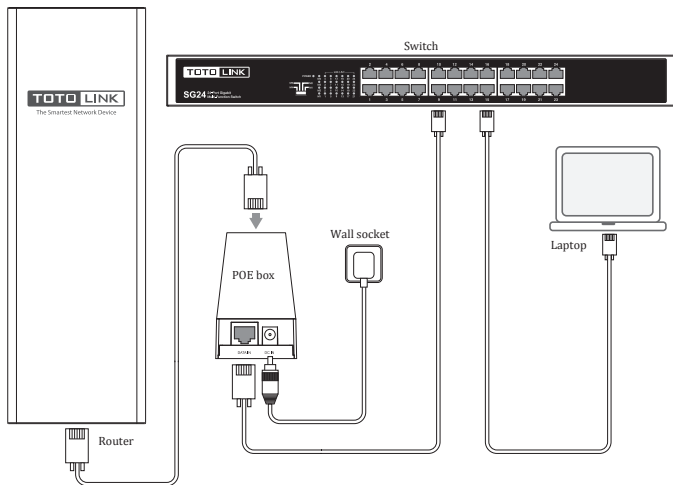
Step 1. Open the sliding closure on the CPE to plug into the Ethernet cable. This may not be easy because the sliding closure is fastened in case it will come off when CPE works outdoors. We recommend you refer to the operations on the below diagram to make it easier.



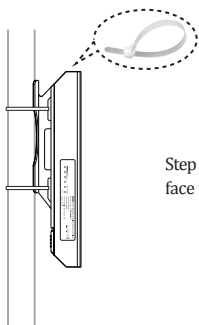
- ① Insert a screwdriver into the seam between CPE shell and sliding closure;
- ② Press down the screwdriver to make the sliding closure slip off.



## Connection diagram:



Step 2. After the Ethernet cable connection, push up the sliding closure to make it fasten again on the case.



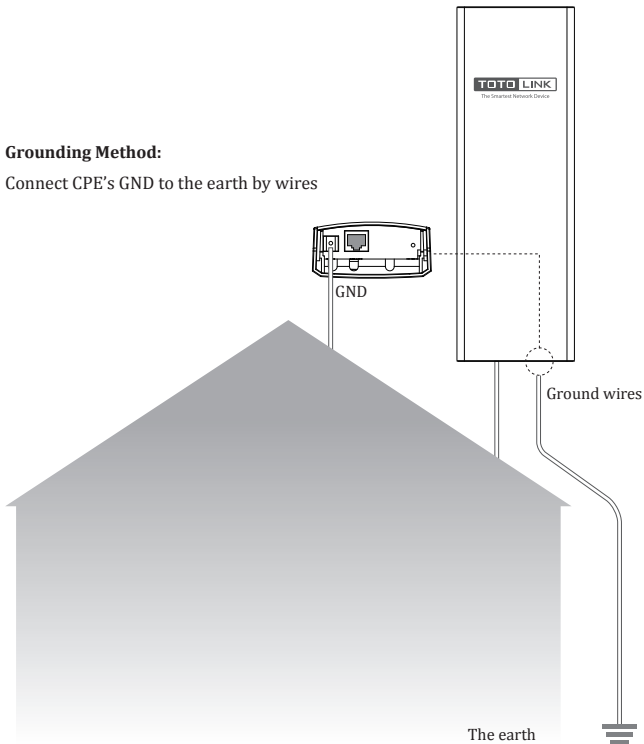
Step 3. Fix the CPE to the pole by strips, then adjust it to face the Wi-Fi coverage area (see left-hand side).

## 2. ESD and lightning Protection

For outdoor devices, it is significant to do the grounding for lightning. If your wireless CPE has a GND port, please connect the port to the earth terminal of the building by yellow & green double color line for grounding, see below. Otherwise, we suggest you use lightning protection device for signal.

### Grounding Method:

Connect CPE's GND to the earth by wires

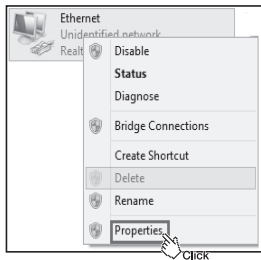


# Easy Setup Guide

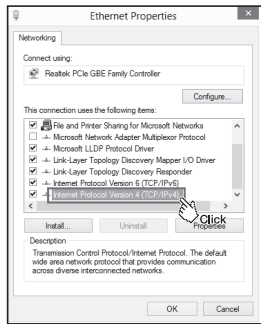
## 1. PC Settings ( for Windows 8 )

After hardware connection, please setup the network parameters of your PC.

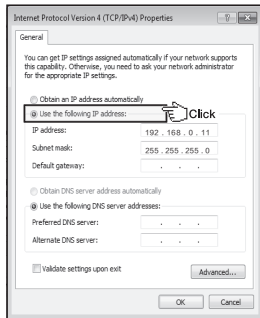
- 1) Click “Start—Control Panel—Network and Sharing Center—Change adapter setting”, right-click “Ethernet”, and choose “Properties”.



- 2) Double-click “Internet Protocol Version 4 (TCP/IPv4)”.



3 ) Choose “Use the following IP address”, input the IP address in the same network segment with your router’s default IP address, as below, then click “OK”.



## 2. Web Interface Login

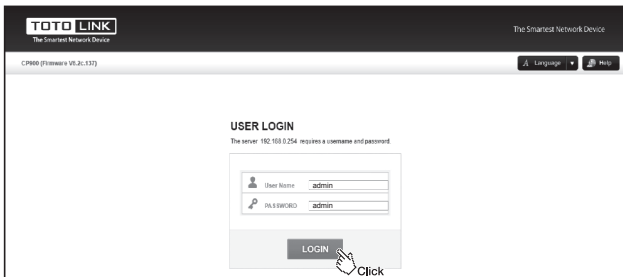
1 ) Open any Web browser:



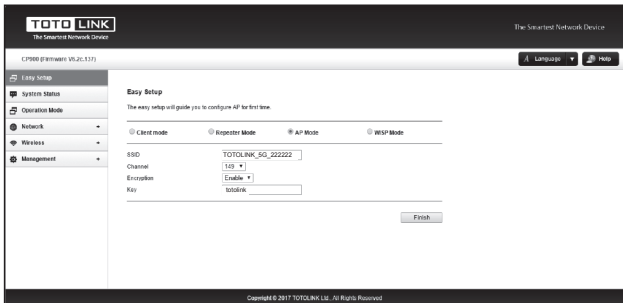
2 ) Enter 192.168.0.254 to access the CPE.



3 ) Upon initial login, enter **admin** in the **User Name** and **Password** fields, and select the appropriate **Language** from the Language drop-down lists. Then click **Login**.



4) Login to the Web interface successfully. First you will see the Easy Setup page.

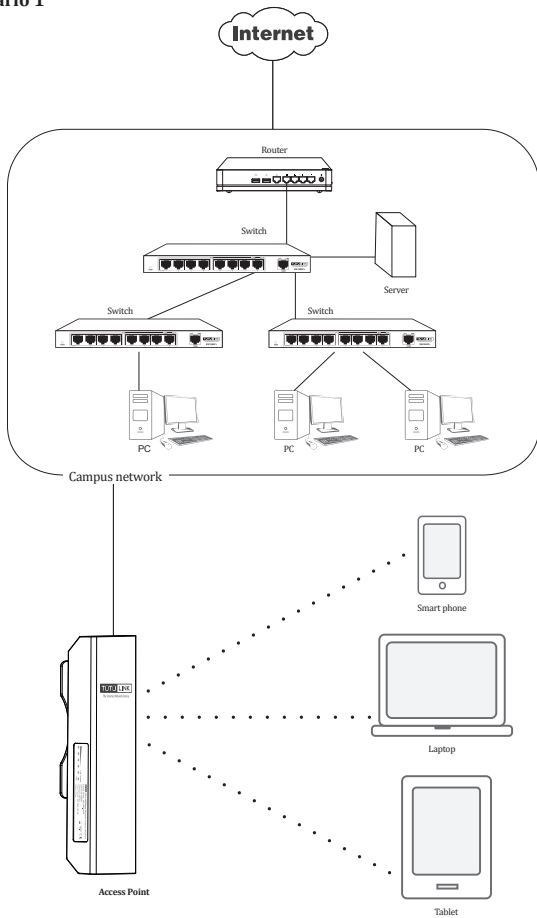


### 3. Working Modes

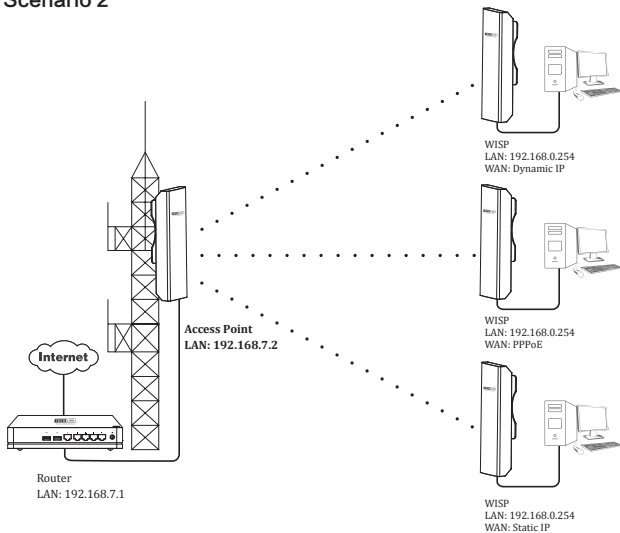
TOTOLINK CPE supports multiple working modes to satisfy diversified network requirement including AP Mode, Client Mode, Repeater Mode and WISP Mode. The following guide introduces typical scenarios of each mode. You can choose the scenario according to your needs.

#### 1) AP Mode

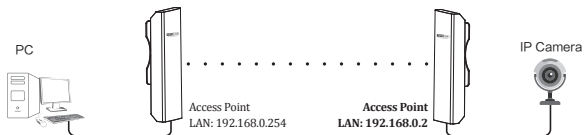
## Scenario 1



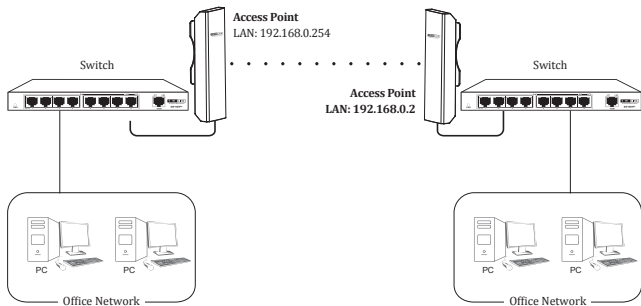
## Scenario 2



## Scenario 3

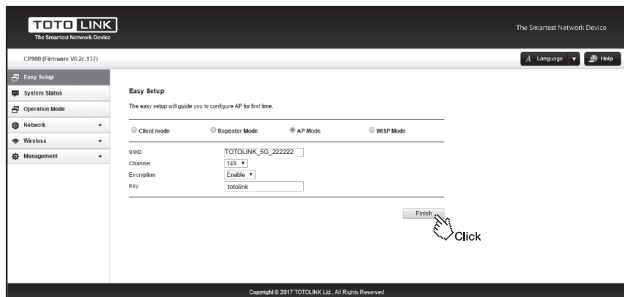


## Connect two office areas



## AP Settings

- 1) Go to the CPE's **Easy Setup** page.
- 2) Choose "**AP Mode**", setup the CPE's **SSID**, **Channel** and **Key**(pass word), click **Finish**.

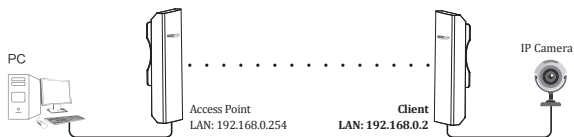


- 3) After the settings, please connect the PoE box's LAN port to upper level network device.

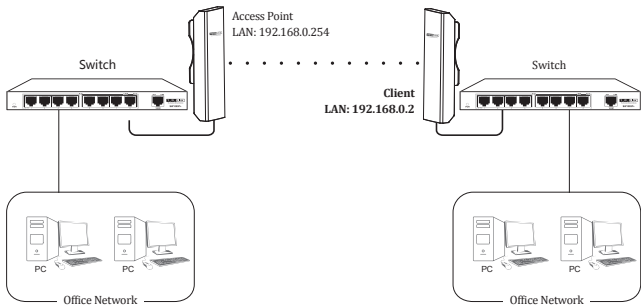


## 2) Client Mode

### Scenario 1



Connect two office areas



### Client Settings

- 1) Go to CPE's Easy Setup page.
- 2) Choose "**Client Mode**", click "**Scan**" to check all available wireless networks around.

**TOTO LINK**  
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CP968 (Firmware V6.2c.137) Language Help

**Easy Setup**

The easy setup will guide you to configure AP for first time.

Client mode
  Repeater Mode
  AP Mode
  WISP Mode

SSID: TOTOLINK\_RPT\_5G  
 BSSID: 00 00 00 00 00 00  
 Encryption: Disable  
 Connect Status: Not connected

**Site Survey List** Scan

Channel	SSID	BSSID	Encryption	Signal	Mode	Select

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3) Choose the SSID you need to connect. Enter correct key, click “Finish”.

**TOTO LINK**  
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CP968 (Firmware V6.2c.137) Language Help

**Easy Setup**

The easy setup will guide you to configure AP for first time.

Client mode
  Repeater Mode
  AP Mode
  WISP Mode

SSID: TOTOLINK\_5G\_8CFE3  
 BSSID: 08 05 11 0C 2F E3  
 Encryption: WPA2-PSK  
 Key: totolink

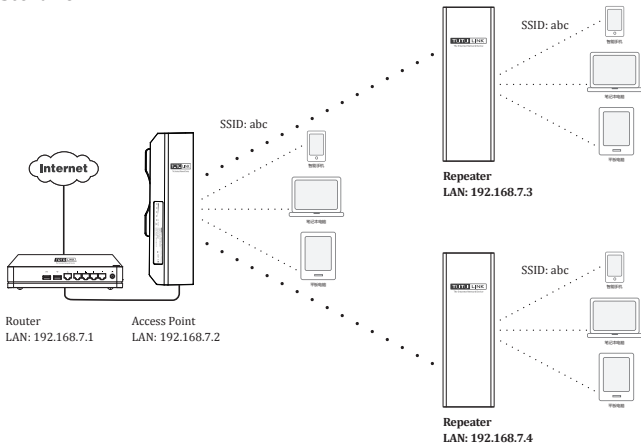
**Site Survey List** Finish Scan

Channel	SSID	BSSID	Encryption	Signal	Mode	Select
149	TOTOLINK_5G_8CFE3	78 24 AF 93 56 0C	WPA2-PSK	98%	11ac	<input checked="" type="radio"/>
149	totolink5g-123	04 E5 99 DA 4E 70	None	79%	11ac	<input type="radio"/>
149	RIDEV_AP_5g	04 E5 99 AB 90 EC	None	52%	11ac	<input type="radio"/>
149	TOTOLINK_5G_47D329	08 36 9C FFF FFE	None	64%	11ac	<input type="radio"/>
157	TOTOLINK_4850R_5G	78 44 76 81 97 D3	None	64%	11ac	<input type="radio"/>
161	goodo-guest	2C C5 D3 7D 37 FC	None	18%	11ac	<input type="radio"/>
149	TOTOLINK_600ec_5G	00 E9 4C 81 96 C 1	WPA2-PSK/AES	42%	11ac	<input type="radio"/>

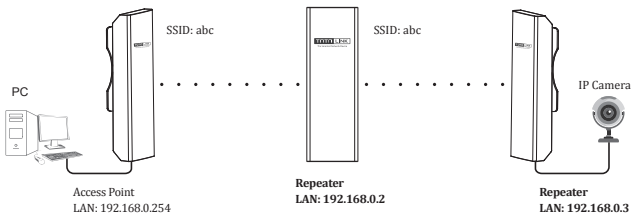
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3) Repeater Mode

## Scenario 1



## Scenario 2



## Repeater Settings

- 1) Go to CPE's **Easy Setup** page.
- 2) Choose "**Repeater Mode**", click "**Scan**" to check all available wireless networks around.

**TOTO LINK**  
The Smartest Network Device

CP900 (Firmware WJ.2c.137) Language Help

**Easy Setup**

The easy setup will guide you to configure AP for first time.

Client mode
  Repeater Mode
  AP Mode
  WISP Mode

SSID: TOTOLINK\_RPT\_SG

BSSID: 00 00 00 00 00 00

Encryption: [Disable]

Connect Status: Not connected

**Site Survey List** Scan

Channel	SSID	BSSID	Encryption	Signal	Mode	Select

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3 ) Select the SSID that you want to connect, enter correct key. Then click “Next” to setup the expanded network parameters.

**TOTO LINK**  
The Smartest Network Device

CP900 (Firmware WJ.2c.137) Language Help

**Easy Setup**

The easy setup will guide you to configure AP for first time.

Client mode
  Repeater Mode
  AP Mode
  WISP Mode

SSID: TOTOLINK\_SG\_6CBFES

BSSID: 00 00 10 00 00 00

Encryption: WPA2-PSK

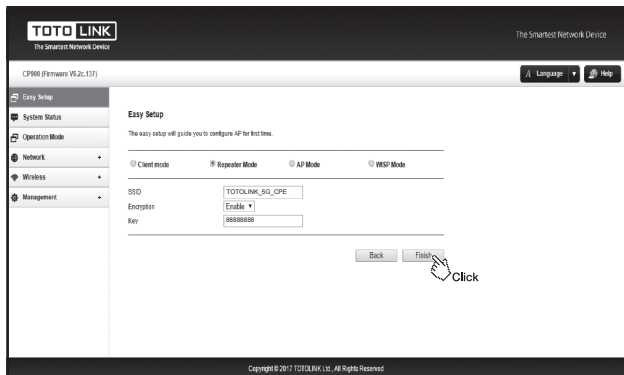
Key: totolink

**Site Survey List** Next Scan

Channel	SSID	BSSID	Encryption	Signal	Mode	Select
149	TOTOLINK_SG_6CBFES	78 24 AF 93 56 CC	NONE	90%	11ac	<input type="radio"/>
149	totolink123	64 E5 99 DA 4E 78	NONE	68%	11ac	<input type="radio"/>
149	RTDEV_AP_5a	64 E5 99 AB 10 EC	NONE	50%	11ac	<input type="radio"/>
149	TOTOLINK_SG_47D329	18 36 6C FF FF FE	NONE	66%	11ac	<input type="radio"/>
157	TOTOLINK_A09R_Sig	78 44 78 81 97 C3	NONE	70%	11ac	<input type="radio"/>
148	TOTOLINK_403a08_50	00 ED 40 81 56 C1	WPA2PSKAES	40%	11ac	<input type="radio"/>
148	Philly	88 36 6C 8B FF 62	WPA2PSK/WPA2PSK/AES	68%	11ac	<input type="radio"/>

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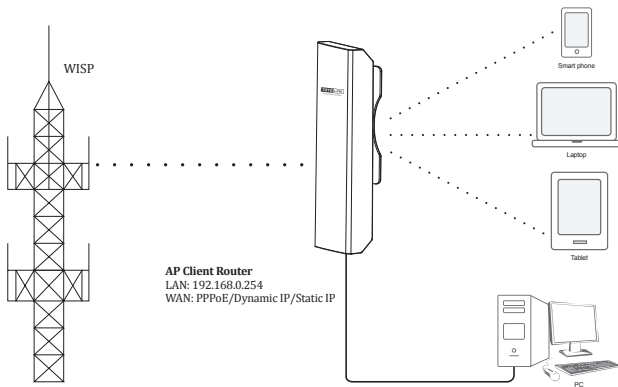
4 ) Setup the expanded network SSID and password. Click “Finish”.



5) Now setup your PC's LAN card IP address to "Obtain the IP address automatically." Or you can access the Wi-Fi network through wireless devices.

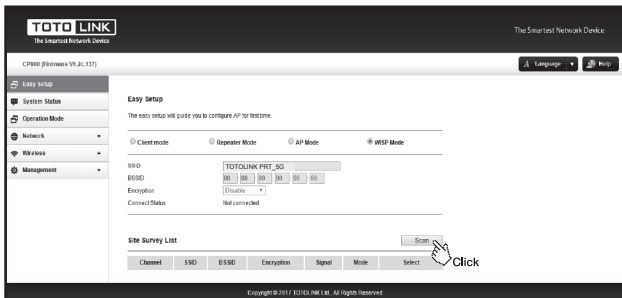
#### 4) WISP Mode

##### Scenario 1

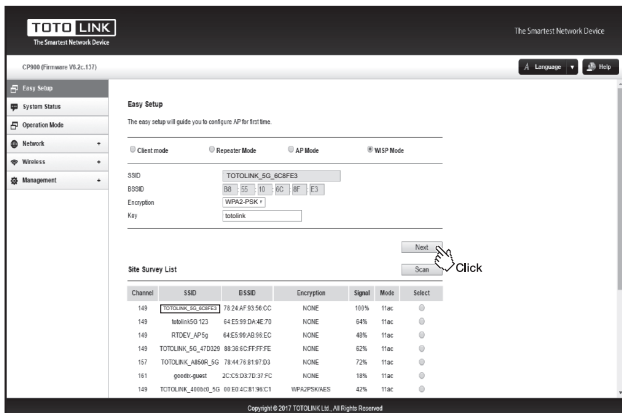


## WISP Settings

- 1) Go to CPE's **Easy Setup** page.
- 2) Choose "WISP Mode", click "Scan", the device will check all available ISP wireless networks around.

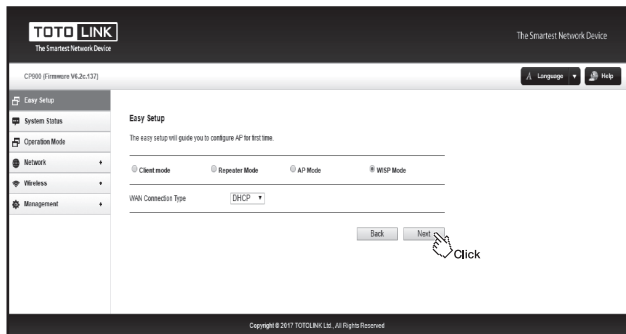


- 3) Select the ISP Wi-Fi you need to connect. Enter correct **Key**. Then click "Next".

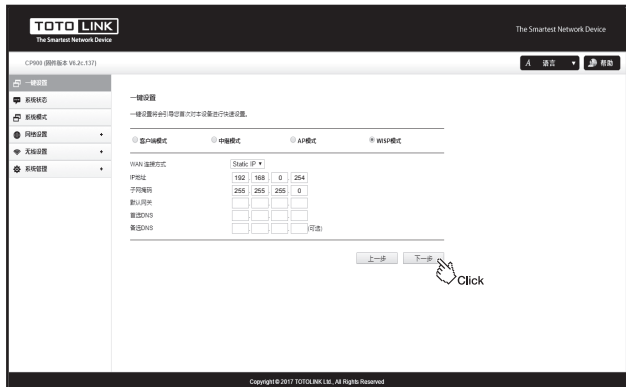


#### 4) Choose WAN Method:

① DHCP, the device will obtain IP address from ISP router automatically. Click “Next” to setup the CPE’s wireless parameters.



② If your ISP provides static IP address, please choose “Static IP”, and input corresponding parameters, click “Next” to setup the wireless parameters.



- ③ PPPoE, please input the User Name and **PASSWORD** provided by your ISP, click “Next” to setup the wireless parameters.

The screenshot shows the TOTO LINK Easy Setup interface. The left sidebar contains navigation options: Easy Setup, System Status, Operation Mode, Network, Wireless, and Management. The main content area is titled "Easy Setup" and includes the instruction: "The easy setup will guide you to configure AP for first time." Below this, there are radio buttons for "Client mode", "Repeater Mode", "AP Mode", and "WISP Mode", with "WISP Mode" selected. The "WAN Connection Type" is set to "PPPoE". There are input fields for "User Name" and "PASSWORD". At the bottom right, there are "Back" and "Next" buttons, with a hand icon pointing to the "Next" button and the word "Click" next to it. The footer contains the copyright notice: "Copyright © 2017 TOTO LINK LTM. All Rights Reserved."

- 5 ) Setup the SSID and Key, click “Finish”.

The screenshot shows the TOTO LINK Easy Setup interface. The left sidebar contains navigation options: Easy Setup, System Status, Operation Mode, Network, Wireless, and Management. The main content area is titled "Easy Setup" and includes the instruction: "The easy setup will guide you to configure AP for first time." Below this, there are radio buttons for "Client mode", "Repeater Mode", "AP Mode", and "WISP Mode", with "WISP Mode" selected. There are input fields for "SSID" (containing "TOTOLINK\_SG\_CPE"), "Encryption" (set to "Enable"), and "Key" (containing "88888888"). At the bottom right, there are "Back" and "Finish" buttons, with a hand icon pointing to the "Finish" button and the word "Click" next to it. The footer contains the copyright notice: "Copyright © 2017 TOTO LINK LTM. All Rights Reserved."

- 6 ) Now setup your PC’s LAN card IP address to “Obtain the IP address automatically.” Or you can access the Wi-Fi network through wireless devices.



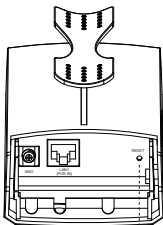
# Specifications

<b>Model No.</b>	<b>CP900</b>
Hardware	
Interface	1*LAN1 ( POE IN ) RJ45 Port
Button	1*RESET Button
Indicators	1*Power, 1*LAN, 4*Signal Strength
Power Supply	24V Passive PoE
Reliability	6KV Lightning Protection 15KV ESD Protection IP65 level dustproof and waterproof
Circuit	Watch-dog circuit
Dimensions ( L X W X H )	237.5mm x 79mm x 58.5mm
Operating Temperature	-30℃~70℃
Storage Humidity	10%~90%
Wireless	
Standard	IEEE 802.11ac/a/n
RF Frequent	5.15~5.85GHz
Antenna	Built-in 13dBi dual polarized antennas
Output Power	26dBm

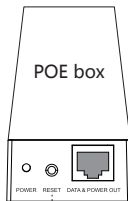
# FAQ

## 1. How to reset the CPE to factory default Settings?

Keep the CPE powered on, press the RESET button on CPE or Passive PoE box about 8 seconds, the CPE will restore to factory default settings.



**RESET**  
Press the RESET button for about 8 seconds until the signal strength indicators blink.



**RESET on PoE box**  
Press the RESET button on PoE box for about 8 seconds until the signal strength indicators blink.

## 2. What Can I do If I forgot the CPE's Web Login User Name and Password?

In case you changed your CPE's Login User Name and Password, we suggest you reset your CPE to factory default settings by above operations. Then use the following parameters to login the CPE's Web interface:

**Default IP address: 192.168.0.254**

**User Name: admin**

**Password: admin**



