

User Manual of Pronto Intelligent Access Point



This is the manual of outdoor CPE, which will approximate guide you how to set and apply the outdoor CPE, it provide a convenient graphical interface for network construction and maintenance person, as well as a user through a simple and accurate operation, and configuration management of the CPE.

1st Connection and Power Supply

1st: Port Connection and power supply

Instruction of different port:



P1 CPE Port Connection

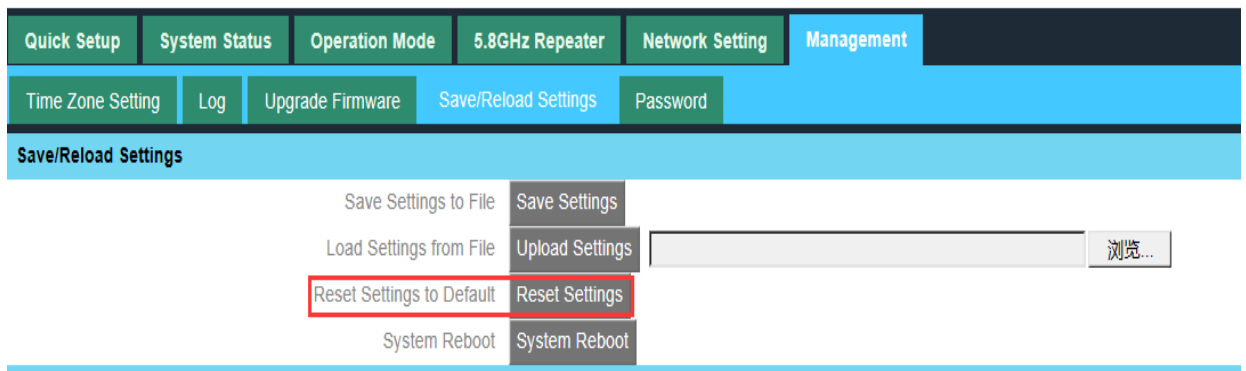
- Please use a power supply of 12V DC adapter or 24V POE adapter, WAN / LAN port is the PoE Port.



Pay Attention

Pls make sure the CPE's power supply is normal in reset process, or the CPE will be damaged and can't reboot

- Reset:
There are two ways to reset the CPE:
1. CPE Manage page: Click "Management", then "Save/Reload Settings", then click "Reset Settings" to finish the CPE Reset



P2 CPE Reset

2. Press the Reset Button on CPE more than 15 seconds, then release, the device will reboot and restore to factory settings

- The connection way of CPE, PoE Adapter and PC:



P3 Connection diagram of CPE and PoE adapter



Pay Attention

Incorrect Connection or the use power adapter and PoE adapter not from our factory, the CPE will be damaged

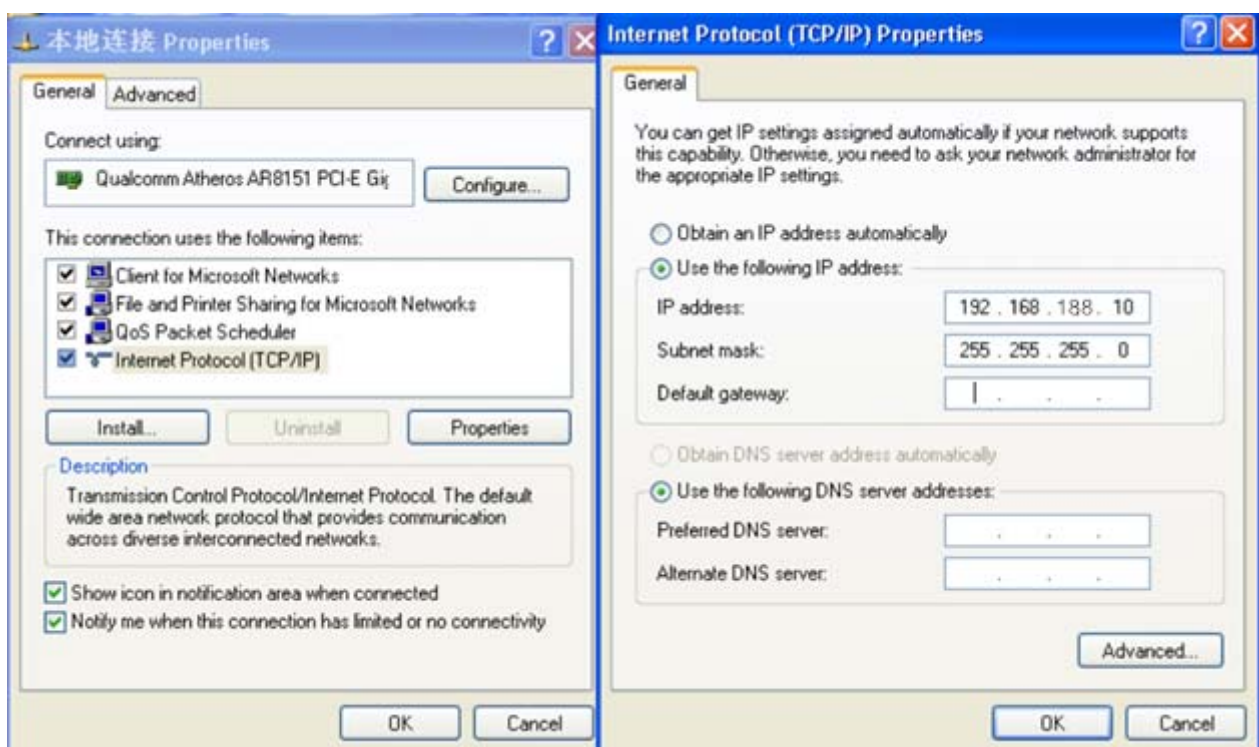
2nd Steps: Login

1) Connect the CPE with computer as P2 picture

2) Configure the PC's local connection IP address as 192.168.188.X (X is number from 2 to 254), subnet mask is 255.255.255.0, follow P4 and P5 to finish.



P4 Setting of computer's IP address



P 5 Setting of computer's IP address

3) Input 192.168.188.253 into IE browser, then pop up the login page, the default login user name: Admin,
 Passwords: admin, pls do following P5



P6 Login

4) After login, then P6 Device Status will be showed:



P7: Device Status

There are four operation mode showed on this page:

Gateway mode, Repeater Mode, AP Mode and WISP Mode;

3rd: Quickly Configure CPE

① Gateway Mode:

Click "Gateway Mode" under following picture and choose the right WAN access type, then input the right SSID,

Channel, key as like.

Quick Setup

Device Status

Gateway Mode

Repeater Mode

AP Mode

WISP

Advanced Settings

CPU Frequency:535MHz
System Memory:512 M
CPU Usage:21%
Memory Usage:18%

Terminal

AP

Internet

Gateway Mode(Basic structure of the network graph)

WAN Access Type

WAN Access Type: Dynamic IP
PPPOE(ADSL)

User Name
Password

Wireless Basic Settings

SSID: SR800-5.8G
Channel: 149 - 5745MHz
Authentication: WPA2-PSK
Cipher Suite: TKIP, AES, TKIP/AES
Key: 66666666

Intelligent Analysis

Apply Changes

P8 Gateway Mode

② WiFi Repeater and Station operation configuration

A. Login the Web management page, click “ Repeater Mode”, then “Scan AP”

Quick Setup

Device Status

Gateway Mode

Repeater Mode

AP Mode

WISP

Advanced Settings

CPU Frequency:535MHz
System Memory:512 M
CPU Usage:24%
Memory Usage:21%

Terminal

AP

AP

Repeater Mode(Basic structure of the network graph)

Wireless Repeater

SSID: WirelessAP
MAC
Channel: 149
Authentication: WPA2-PSK
Cipher Suite: TKIP, AES
Key: 66666666

lockmac

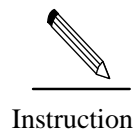
Apply Change

P9 Repeater Mode

B. Select the AP's SSID want to bridge, take SR800-5.8G for example.



P10 Select AP



Instruction

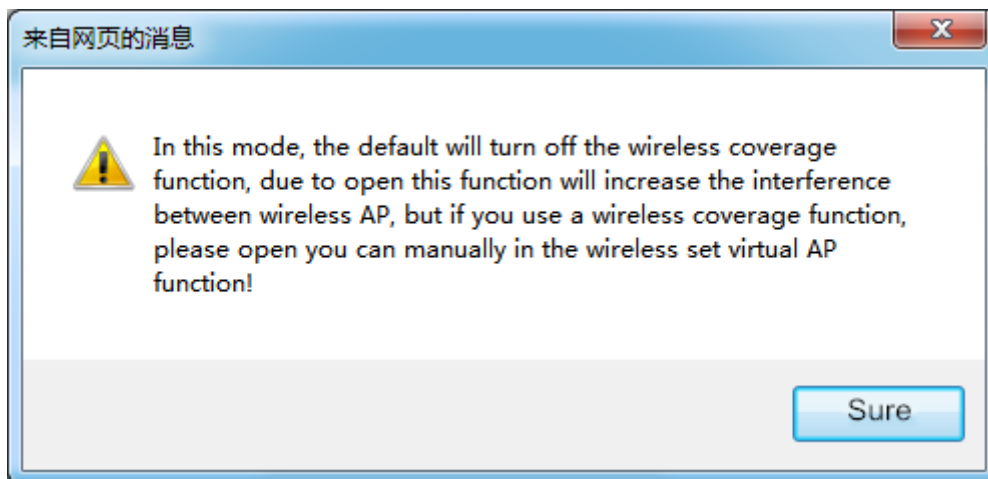
If your computer can't pop up this window, pls check your IE explorer and see whether it is blocked already. And if this CPE can't scan any SSID, pls check if there are 5G wireless signal.

C. input the AP's key, and apply changes



P11 Repeater Mode

D. In Repeater Mode, the SSID is disabled in default setting, it works as Station; Then if need SSID broadcast in this operation mode, just manually change under Advanced Settings, So, click sure in this part to finish the repeater operation mode setting.



P12 Notice

E. After this step, can click the Device status to check the status of this CPE. And it will show CPE's LAN Interface, WLAN status and Signal Strength.

Device Status

- Gateway Mode
- Repeater Mode
- AP Mode
- WISP
- Advanced Settings

CPU Frequency: 535MHz
System Memory: 512 M
CPU Usage: 33%
Memory Usage: 18%

Operation Mode: Repeater Mode

LAN Interface Setup

IP Address: 192.168.188.253
MAC Address: 78:D3:8D:BF:CE:C4

WLAN Status

WLAN Status: Disabled
SSID: WirelessAP1
Encryption: Open System-OPEN
Channel Number: 149
Repeater Status: Enabled
Wireless Repeater SSID: SR800-5.8G
Encryption: WPA2PSK-AES
Repeater Status: BSSID[12:34:56:00:00:40]
Signal Strength: -57 dBm

P 13 Device Status

F. Then if SSID should be broadcast under repeater mode, pls click “Advanced Settings” , then “5.8GHz Repeater” will pop up.

If want to bridge another AP’s SSID, then can setup in this part and Apply changes.

Quick Setup **System Status** **Operation Mode** **5.8GHz Repeater** **Network Setting** **Management**

5.8GHz Repeater **5.8GHz Virtual AP** **5.8GHz Advanced** **English**

Wireless Repeater

Status: ☐ Disabled ☒ Enabled

SSID: SR800-5.8G **ScanAP**

MAC: 12:34:56:00:00:40 ☐ lockmac

Channel: 149

Authentication: WPA2-PSK

Cipher Suite: ☐ TKIP ☒ AES

Key: 66666666

Apply Change

P14 5.8G Repeater

G. Click “5.8GHz Virtual AP”, will show SSID shut off, if need SSID broadcast, pls follow steps of 1,2,3,4,5,6 showed in following picture. This CPE will work under wireless repeater and broadcast SSID after apply changes.

Setup System Status Operation Mode **5.8GHz Repeater** Network Setting Management

Repeater 5.8GHz Virtual AP 5.8GHz Advanced English

VAP Settings

3 VAP Interface ☒ Disabled ☐ Enabled

4 SSID WirelessAP1

Broadcast SSID ☐ Disabled ☒ Enabled

WMM ☐ Disabled ☒ Enabled

5 Authentication Open

6 Apply Changes Reset

Status	Band	SSID	Broadcast SSID	Rate	WMM	Security	2 Edit
1	B+G+N	WirelessAP1	Enabled	Auto	Enabled	Open	<input checked="" type="radio"/>
	B+G+N	WirelessAP2	Enabled	Auto	Enabled	Open	<input type="radio"/>
	B+G+N	WirelessAP3	Enabled	Auto	Enabled	Open	<input type="radio"/>

P15 5.8GHz Virtual AP

③ AP Mode

Plug and Play to transmit wireless signal for wireless end users form wired networking. In this part, user can mark the AP's location and name for easy problem checking. Then can change SSID, Key, Channel as request.

Quick Setup Device Status Gateway Mode Repeater Mode **AP Mode** WISP Advanced Settings

CPU Frequency:535MHz
System Memory:512 M
CPU Usage:23%
Memory Usage:18%

AP Mode(Basic structure of the network graph)

Terminal AP Switch

Location Information

AP Location

AP Name

Wireless Basic Settings

SSID SR800-5.8G

Channel 149 - 5745MHz Intelligent Analysis

Authentication WPA2-PSK

Cipher Suite ☐ TKIP ☒ AES ☐ TKIP/AES

Key 66666666

Apply Changes

P16 AP Mode

④ WISP

In this operation mode, user should confirm the WAN access type at first, then set the SSID, key, Channel as request.

Quick Setup

Device Status

Gateway Mode

Repeater Mode

AP Mode

WISP

Advanced Settings

CPU Frequency:535MHz
System Memory:512 M
CPU Usage:23%
Memory Usage:18%

WISP(Basic structure of the network graph)

WAN Access Type

WAN Access Type

Dynamic IP

PPPOE(ADSL)

PPPOE(ADSL)

User Name

Password

WISP

SSID

SR800-5.8G

ScanAP

MAC

12:34:56:00:00:40

☐ lockmac

Authentication

WPA2-PSK

Channel

149

Cipher Suite

☐ TKIP
☒ AES

Key

66666666

Apply Changes

P17 WIPS Mode

⑤ Advanced Settings:

1. System Status

Click "Advance Settings", will show system status, such as firmware version, build time, System uptime...

Quick Setup

System Status

Operation Mode

5.8GHz Repeater

Network Setting

Management

System Status

5.8GHz Wireless Status

LAN Status

Status

Firmware Version

CPE880-SPI-2T2R-V1.1-V5.3-B20150505203256

Build Time

20150505203256

System uptime

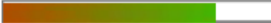
0Day 2H 24M 28S

P18 System Status

Click 5.8GHz Wireless Status, will show CPE's WLAN Status, Signal Strength, SSID...

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
System Status	5.8GHz Wireless Status	LAN Status			
WLAN Status					

5.8GHz WLAN Status Infrastructure Client(Connected)

Signal Strength  -59 dBm

Channel-Band 5GHz(AN) channel149

SSID SR800-5.8G

BSSID 12:34:56:00:00:40

Encryption WPA2-PSK

MAC Address 7A:D3:8D:BF:CE:C5

Repeater Status					
5.8GHz WLAN Status AP(Disabled)					
Rate auto					
SSID WirelessAP1					
BSSID 7A:D3:8D:BF:CE:C5					
Encryption Open					

P19 5.8GHz Wireless Status

If want to check LAN status, pls check following picture

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
System Status	5.8GHz Wireless Status	LAN Status			
LAN Status					
IP Address 192.168.188.253					
Subnet Mask 255.255.255.0					
DHCP Server Disabled					
MAC Address 78:D3:8D:BF:CE:C4					

P20 LAN Status

2. Operation Mode:

Set operation mode manually, choose the right operation mode, then apply changes. The function of this part will be same as Quick Setup step.

Quick Setup

System Status

Operation Mode

5.8GHz Repeater

Network Setting

Management

Operation Mode

English

Operation Mode

☐ Gateway Mode
 In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPOE, DHCP client or static IP.

☒ Repeater Mode
 In this mode, all ports are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.

☐ WISP Mode
 In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP access point. The NAT is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN. You must set the wireless client mode first and connect to the ISP AP in Site-Survey page. The connection type can be setup in WAN page by using PPPOE, DHCP client or static IP.

☐ AP Mode
 In this mode, the AP wireless interface and cable interface bridging together. Without NAT, firewall and all network related functions.

Apply Changes

P21 Operation Mode

3. 5.8GHz Repeater:

In this part, you can scan AP's SSID, disable or enable CPE's SSID, modify Channel, Country code, Key..

Quick Setup

System Status

Operation Mode

5.8GHz Repeater

Network Setting

Management

5.8GHz Repeater

5.8GHz Virtual AP

5.8GHz Advanced

English

Wireless VAP Settings

VAP Interface

☐ Disabled
 ☐ Enabled

SSID

Broadcast SSID

☐ Disabled
 ☐ Enabled

WMM

☐ Disabled
 ☐ Enabled

Authentication

Open

Key Length

☐ Wep 64 Bit
 ☐ Wep 128 Bit

Cipher Suite

☐ TKIP
 ☐ AES
 ☐ TKIP/AES

Key Format

ASCII(5 characters)

Key

Apply Changes

Status	Band	SSID	Broadcast SSID	Rate	WMM	Security
(Off)	B+G+N	WirelessAP1	Enabled	Auto	Enabled	Open
(Off)	B+G+N	WirelessAP2	Enabled	Auto	Enabled	Open
(Off)	B+G+N	WirelessAP3	Enabled	Auto	Enabled	Open

P22 5.8GHz Repeater

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
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5.8GHz Repeater	5.8GHz Virtual AP	5.8GHz Advanced	English
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Wireless Advanced Settings

Country Region	United States		
Fragment Threshold	2346	(256-2346)	
RTS Threshold	2346	(0-2347)	
Ack Timeout Control	64	(0-255)us	
Beacon Interval	100	(100-1000)ms	
Max Users	40	(0-40)	
Preamble Type	<input checked="" type="radio"/> Long Preamble	<input type="radio"/> Short Preamble	
Aggregation	<input type="radio"/> Disabled	<input checked="" type="radio"/> Enabled	
Short GI	<input type="radio"/> Disabled	<input checked="" type="radio"/> Enabled	
WLAN Partition	<input checked="" type="radio"/> Disabled	<input type="radio"/> Enabled	
RF Output Power			

Apply Changes

P23 5.8GHz Advanced

Note: The frequency selection feature is disabled by firmware for devices marketed to the US. only channels 1-11 will be used in North America. Country code selection is disabled.

4. Network Setting

LAN Interface Setup mainly showed as follow:

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
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LAN Interface

LAN Interface Setup

IP Address	192	168	188	253
Subnet Mask	255	255	255	0

Apply Changes

DHCP Server ☒ Disabled ☐ Local

DHCP Client Range 192 . 168 . 188 . 2 - 192 . 168 . 188 . 252

Lease Time(sec) 86400

Apply Changes

P24 Network Setting

5. Management

In this part, user can set Time zone, show Log info, upgrade firmware, change login user name and password;

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
Time Zone Setting	Log	Upgrade Firmware	Save/Reload Settings	Password	English

Time Zone Setting

Current Time 2015-01-01 17:58:25 [Sync with host](#)

Time Zone Select (GMT+13)United States

☐ Enable NTP client update

NTP Server ☒ 192.5.41.41 - North America

☐ 0.0.0.0 (Manual IP Setting)

☐ After device running 1 days, Automatic optimization system

[Apply](#)

P25 Management

6. Upgrade Firmware

Pls click Upgrade Firmware, then browse and choose the firmware should upgrade, then click upgrade to upgrade the firmware.

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
Time Zone Setting	Log	Upgrade Firmware	Save/Reload Settings	Password	English

Upgrade Firmware

Firmware Version CPE880-SPI-2T2R-V1.1-V5.3-B20150505203256

Build Time 20150505203256

Select File [Browser](#) [Upgrade](#)

Note: do not power off the device during the upload because it may crash the system!

P26 Firmware Upgrade

After finish firmware upgrade, pls click Save/Reload Settings, then reset settings to default.

Quick Setup	System Status	Operation Mode	5.8GHz Repeater	Network Setting	Management
Time Zone Setting	Log	Upgrade Firmware	Save/Reload Settings	Password	

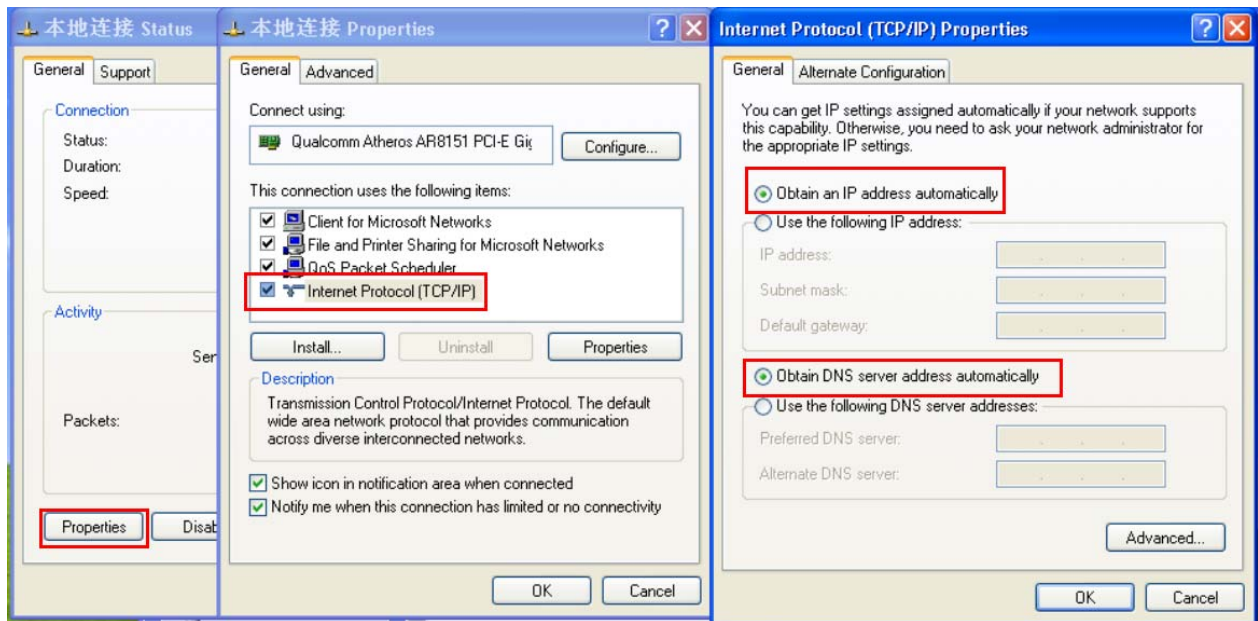
Save/Reload Settings

Save Settings to File	Save Settings
Load Settings from File	Upload Settings <input type="text"/> 浏览...
Reset Settings to Default	Reset Settings
System Reboot	System Reboot

After that, the firmware upgrade is finished.

7. Share Internet and Obtain IP address automatically

Set computer's TPC/IP as [Obtain an IP address automatically](#), [Obtain DNS server address automatically](#) as following picture showed. the computer will obtain the IP address from router or base station to get Internet.



Trouble Shooting:

F 1 The Failure phenomenon and solution

Failure phenomenon	Solution
SYS Indicator off	Pls make sure the PoE module connection is right. POE Port connect with CPE, LAN port connect with computer
Can't land to CPE through Web page	Pls check the IP address of computer and CPE to see whether they are in same networking segment, The method is click "start"->"Run" input"cmd", ping 192.168.188.253 to test the CPE connectivity. Reset CPE and load it again; Pls make sure the IP address 192.168.188.253 is not occupied by other device in CPE's networking; Check computer and cable problem, recommend to use 10/100M UTP unshielded cable; Clean up Arp binding from "Start"->"Run" input"cmd" arp -d Clean the IE Brower's temporary files and Cache file.
CPE can't connect with AP (the status display unconnected)	Try to scan the available wireless networking again; Make sure the CPE's wireless standard is correct; The Security and passwords are matched between CPE and AP; The signal strength of AP is too weak to connect, should be more than -75dBm;
Can't scan the wireless AP	Scan it several times more; Make sure there are 5G signal existed. Reset the CPE, scan it again after CPE restart;
The connection of CPE and AP is success, but the computer can't share internet	Pls Check the computer's IP address and DNS setting. If it is dynamain, set the network card as automatically obtain. If it is static IP, pls contact with ISP for correct IP address and DNS address.
How to Reset CPE	Press the "Reset" button more than 15 seconds after power on. The CPE will restore factory default after the CPE restart.

Note:

*. 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.

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