wis

Quick Installation Guide

Outdoor CPE

Model:WIS-CPE300/CPE900

1 Device Installation

Passive PoE Adapter supports up to 60 meter (200 feet) Power over Ethernet deployment

Completed connection, push up to restore the CPE back cover

Please prepare a long enough network cable to connect the POE adapter and CPE. Recommend to use a Category 5 (or above) shielded network cable with a ground wire.

POE LAN

Connect the PoE adapter's LAN to PC, Router or Switch based on the network topology

Working Environment:

≤ 2000m

Only applicable to areas below 2000 meters above sea level

Only applicable to non-tropical weather conditions

Place the CPE to the selected position and adjust the CPE front panel orientation to be approximately the same as the selected direction
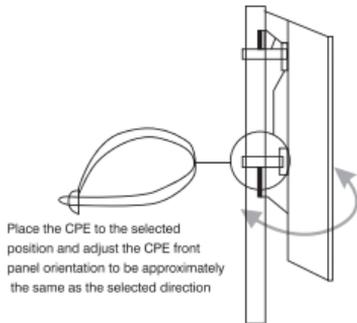
3. Bridge Ways

Two bridge ways:WDS Key Bridge & LED Display Bridge,Choose The way based on request

1. One Key Bridge

1. Config Master/ Slave CPE

Put the switch to M, CPE will work as Mast. Put the switch to S, CPE will work as Slave.
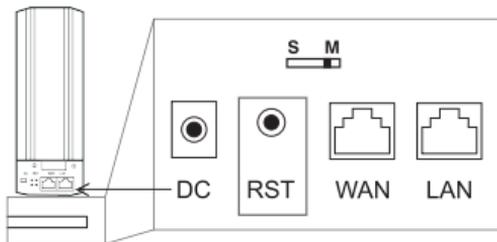
2. Point to Point Connection

Press reset button on both master and slave CPE, will start briding.

Point to mult Point Connection

Press reset button on master and mult slave CPEs, will start briding.

Note: Master CPE and slave CPE bridging actions (press reset button) need to be finished
in 1 minute.

Finish within 2'20''

Press Reset on both side at same time

Master CPE   Slave CPE
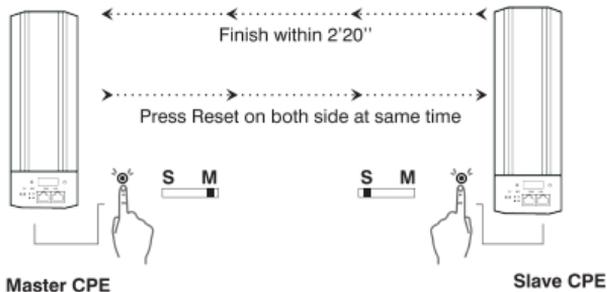
2.LED Display Bridge

1.Config Master CPE
When bridge two CPEs, make one work as master: press "F" to make H/ C blinking, and press "S" to
change to "H", it will save automatically in 5 seconds.

2.Config Slave CPE
Set another CPE to work as slave: press "F" to make H/ C blinking, and press "S" to change to "C", it
will save automatically in 5 seconds.

◉   H060   ◉
F   S

Note:

1.CPE default working mode is AP mode after reset, IP is 192.168.2.2

2.F is select button, can be used to choose master/ slave working mode, wifi channel, IP, and checking signal strength

3.S is config button, can be used to set master/ slave working mode, wifi channel, IP

3.Point to Point Connection
Press reset button on both master and slave CPE, will start briding.

Point to mult Point Connection
Press reset button on master and mult slave CPEs, will start briding.

Note: Master CPE and slave CPE bridging actions (press reset button) need to be finished in 1 minute.

Finish in 1 minute

H06

0

Press Reset on both side at same time

RST

Master CPE

RST

C060
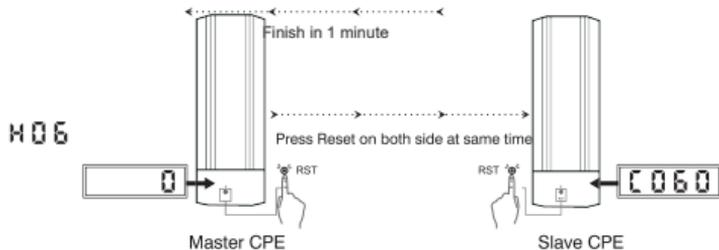
Slave CPE

4.Change Wifi channel

To avoid signal interference, need to change master CPE wifi channel only, slave CPE will reboot and bridge to master CPE automatically. Press F twice, change channel by press S, CPE will save and reboot automatically in 5 seconds.

```
H060                    C060
```

H--- Master CPE   C--- Slave CPE

060---60 Channel   060---60 Channel

Web Configuration

1.PC configuration if PC connect CPE by wireless

Set PC wireless network IP to 192.168.2.x(x:2--250),samenetwork segment as CPE,subnet mask:255.255.255.0

```
Wireless Network
Wireless5.8G
1x1 11b/g/n Wireless Lan PCI...
```

🛡	Disable
	Connect/Diconnect
	Status
	Diagnose
🛡	Bridge Connections
	Create Shortcut
	Delete
🛡	Rename
🛡	Properties
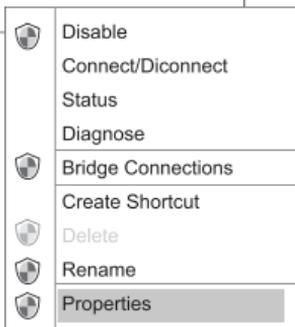
Check wireless connection

After ip address configuration,connect to CPE's wireless SSID: Wireless 5.8G,and input password (Default Password:66666666)

2.Login Web configuration

Use IE Browser to access https://192.186.2.2(Master) / https://192.186.2.100(Slave) pop up the login page shown below,input the login password:admin,enter into the home page.

Login Web Interface

INTELLIGENT 900M WIRELESS BRIDGE

* Login Device

| admin | 👁 | Login |

Homepage

| Operation Mode Super WDS Mode | Flow | — WDS Down Stream | — WDS Up Stream |
| 📍 Device Location | | | |

Home
Wizard
CPE
WiFi
Network
Manage

Uptime:00:04:19

▤ Device Information	▤ LAN Information	▤ WDS Information	▤ WiFi Information
CPU Usage 4%	IP Address Get IP from AC	Encrypt Open	Status ON
	Lan IP 192.168.2.2/ 8/8	AP BSSID N/A	SSID Wireless-BG
	Subnet 255.255.255.0	AP BSSID N/A	Channel 44
Memory Usage 42%	AC Address 192.198.180.l	AP BSSID N/A	Encrypt WPA/WPA2PSK_TKIP&AES
	MAC Address 44:D1:FA:AC:D6:AC	AP BSSID N/A	MAC Address 44:D1:FA:AC:D8:88

www.wisnetworks.in

Setup Wizard

Repeater Mode   AP Mode

Repeat mode
Bridge the exist wireless signal then transmit Wi-Fi for more range

AP mode
In this mode, NAT, DHCP, firewall, and all WAN-related functions are turned off. All wireless and wired interfaces are bridged together, regardless of LAN and WAN

3.Bridge Status
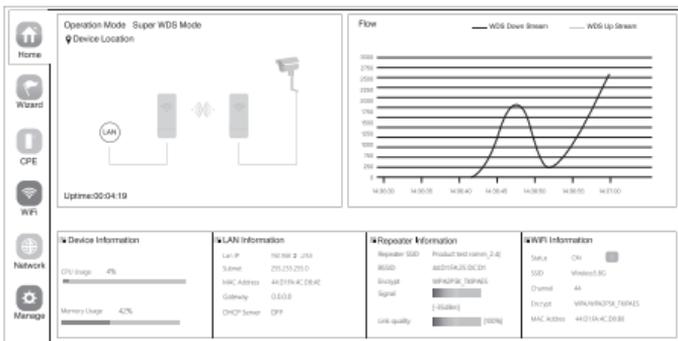
Login CPE (work as repeater), will see signal strength, green is normal, between
-70dBm to -40dBm.

5.Login WEB by Mobile Phone

Outdoor CPE support mobile phone Login and set, the configure page showed as follow:
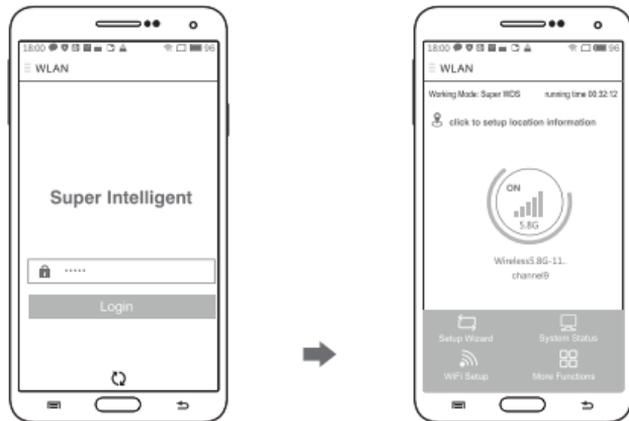
Steps:

1. Mobile phone connect with outdoor CPE, SSID:Wireless5G, password:66666666, or please refer to product sticker for SSID, password.

2. Configure static IP

   Static IP address configuration on Android Mobile Phone

   Open settings in phone, turn on WLAN and find the SSID of the CPE, touch it for a long time until there is a menu, then choose"static IP" in the menu, set the mobile phone IP address as 192.168.2 .X (X can not be 253 or 252), same network segment as CPE, subnet mask: 255.255.255.0, then gateway, subnet mask and domain .

   Static IP address configuration on IOS Mobile Phone

   Open settings and choose Wi-Fi, connect with CPE, click exclamation mark①, manual to set IP address 192.168.188.X (X can not be 253 or 252) and subnet for mobile phone, note: mobile phone's IP address should be same network segment as CPE.

3. Input 192. 2 .188.253 on the internet explorer bar, input admin to login the mobile configuration page.

① Android system setup steps

② IOS system setup steps

Wireless Bridge Regional Channel Code Instructions

Regional Code	5G Channel	
China	5.180GHz	(Channel 36)
	5.200GHz	(Channel 40)
	5.220GHz	(Channel 44)
	5.240GHz	(Channel 48)
	5.260GHz	(Channel 52)
	5.280GHz	(Channel 56)
	5.300GHz	(Channel 60)
	5.320GHz	(Channel 64)
	5.745GHz	(Channel 149)
	5.765GHz	(Channel 153)
	5.785GHz	(Channel 157)
	5.805GHz	(Channel 161)
	5.825GHz	(Channel 165)
America	5.180GHz	(Channel 36)
	5.200GHz	(Channel 40)
	5.220GHz	(Channel 44)
	5.240GHz	(Channel 48)
	5.260GHz	(Channel 52)
	5.280GHz	(Channel 56)
	5.300GHz	(Channel 60)
	5.320GHz	(Channel 64)
	5.500GHz	(Channel 100)
	5.520GHz	(Channel 104)
	5.540GHz	(Channel 108)
	5.560GHz	(Channel 112)
	5.580GHz	(Channel 116)
	5.600GHz	(Channel 120)
	5.620GHz	(Channel 124)
	5.640GHz	(Channel 128)
	5.660GHz	(Channel 132)
	5.680GHz	(Channel 136)
	5.700GHz	(Channel 140)
	5.745GHz	(Channel 149)
	5.765GHz	(Channel 153)
	5.785GHz	(Channel 157)
	5.805GHz	(Channel 161)
	5.825GHz	(Channel 165)

Regional Code	5G Channel	
ETSI	5.180GHz	(Channel 36)
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	5.280GHz	(Channel 56)
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	5.540GHz	(Channel 108)
	5.560GHz	(Channel 112)
	5.580GHz	(Channel 116)
	5.600GHz	(Channel 120)
	5.620GHz	(Channel 124)
	5.640GHz	(Channel 128)
	5.660GHz	(Channel 132)
	5.680GHz	(Channel 136)
	5.700GHz	(Channel 140)

Regional Code	2.4G Channel	
China	2.412GHz	(Channel 1)
	2.417GHz	(Channel 2)
	2.422GHz	(Channel 3)
	2.427GHz	(Channel 4)
	2.432GHz	(Channel 5)
	2.437GHz	(Channel 6)
	2.442GHz	(Channel 7)
	2.447GHz	(Channel 8)
	2.452GHz	(Channel 9)
	2.457GHz	(Channel 10)
	2.462GHz	(Channel 11)
	2.467GHz	(Channel 12)
	2.472GHz	(Channel 13)
America	2.412GHz	(Channel 1)
	2.417GHz	(Channel 2)
	2.422GHz	(Channel 3)
	2.427GHz	(Channel 4)
	2.432GHz	(Channel 5)
	2.437GHz	(Channel 6)
	2.442GHz	(Channel 7)
	2.447GHz	(Channel 8)
	2.452GHz	(Channel 9)
	2.457GHz	(Channel 10)
	2.462GHz	(Channel 11)

Trouble Shooting

Trouble	Reason	Solution
Packet Latency	1.Wireless Interference 2.Distance is too long,or there are some bar between them 3.CPE's angle in wrong direction, weak signal	1.Use Wi-Fi analysis to choose the best channel, or change to 5G CPE 2.CPE should be in normal distance,and avoid bar 3.Adjust the angle of CPE according to signal strength
Wrong password	1.Forget password 2.Input wrong password 3.Too much cookie	1.Press reset button in 10 seconds to reset device, the default password is admin 2.Re-input the password 3.Clear cookie,run arp -d to clear MAC table.
Can not login WEB	1.Local IP is not in the same network segment of CPE 2.IP is taken by other devices 3.LAN Connection or Ethernet cable has problem 4.Too much cookie, MAC address haven't update	1.Ping 192.168.188.253 to see connection status 2.Stop other devices or change to another IP 3.Check LAN Connection and Ethernet cable 4.Clear cookie,run arp -d to clear MAC address
System LED light off	1.PoE power supply is not working 2.Some problem in CPE's PoE port 3.Ethernet cable is loose, RJ45 port is wrong Power current/voltage lower or wrong	1.Check if POE Adapter or POE switch work 2.Check if POE port of CPE is OK 3.Check if Ethernet cable is loose,if Ethernet cable plugged in to POE port 4.Check if voltage is normal ,if socket has problem, if input voltage of POE adapter is normal
Low transmission Rate	1.Packet Latency 2.Ethernet cable circuit 3.Network virus attack 4.Too much access users	1.Adjust the distance, angle and channel to decrease latency 2.Check if there is circuit in the network 3.Check if port isolated to avoid network virus and broadcast storm 4.Decrease the access users.
Device always dead	1.Static electricity 2.Running time too long 3.Lightning stroke	1.Make CPE or POE adapter need ground connection 2.Running time over 7 days, reboot it 3.After lightning,device POE port broken or unstable, better to deploy lightning conductor .