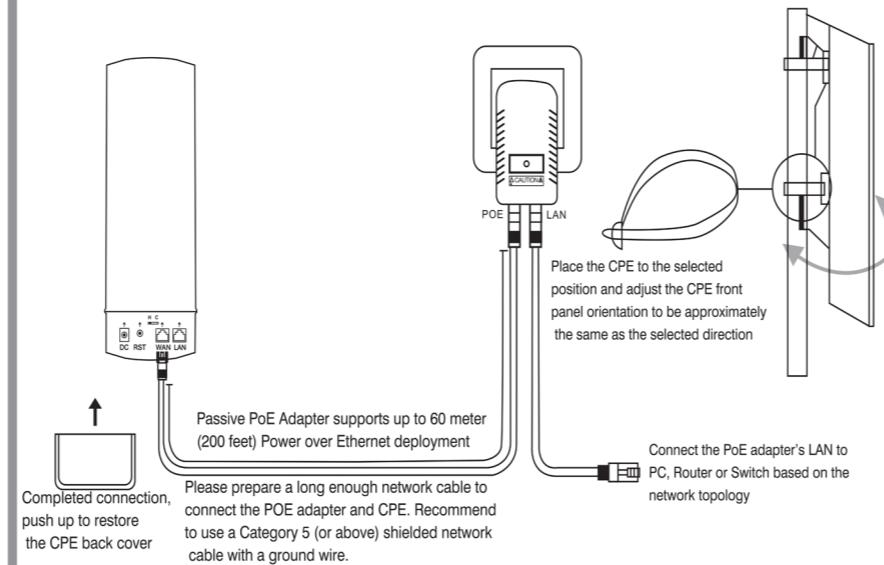


1 Device Installation

(Take the 5.8g wireless bridge as an example)

Quickly Installation Guide

Outdoor Wireless Bridge



Working Environment:



Only applicable to areas below 2000 meters above sea level

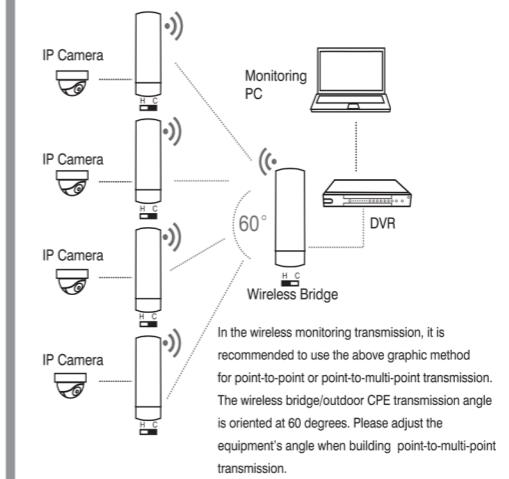


Only applicable to non-tropical weather conditions

PJ-SMSX-166 v1.01

2 Wireless Connection Topology

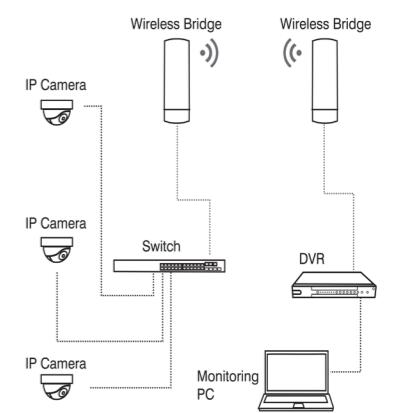
Point to multiple point



IP Camera --- Wireless Bridge

Wireless Bridge --- DVR --- Monitoring PC

Point to Point



IP Camera --- Switch --- Wireless Bridge --- DVR --- Monitoring PC

3.Bridge Ways

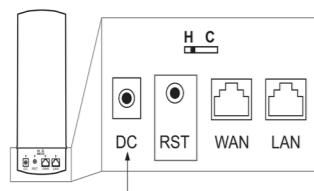
(*Two bridge ways: WDS Key Bridge & LED Display Bridge, choose the way based on request.)

Quickly Installation Guide

1. One Key Bridge

1. Config Master/ Slave CPE

Put the switch to H, CPE will work as Mast. Put the switch to C, CPE will work as Slave.



* Note: The pictures of the above products may change slightly according to the production cycle, and the final appearance is based on the physical object.

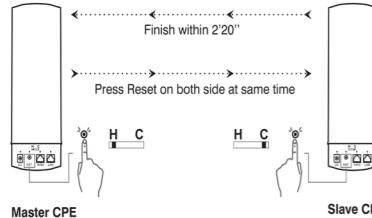
2.Point to Point Connection

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

Point to mult Point Connection

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

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



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.



Note:

- 1.CPE default working mode is AP mode after reset, IP is 192.168.188.253
- 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

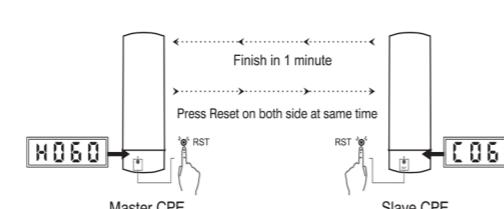
3.Point to Point Connection

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

Point to mult Point Connection

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

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



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.



H--- Master CPE
060---60 Channel



C--- Slave CPE
060---60 Channel

5.Change IP

To avoid CPE IP conflicts, need to change CPE IP address. Press F three times until the IP is blinking, press S to change IP, CPE will save and reboot automatically in 5 seconds.

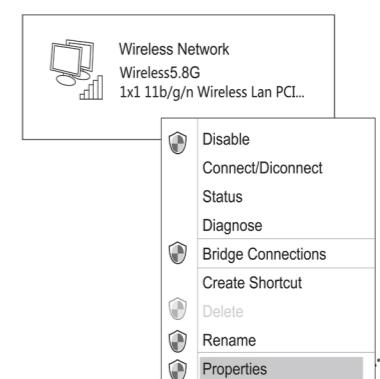


F S

Web Configuration

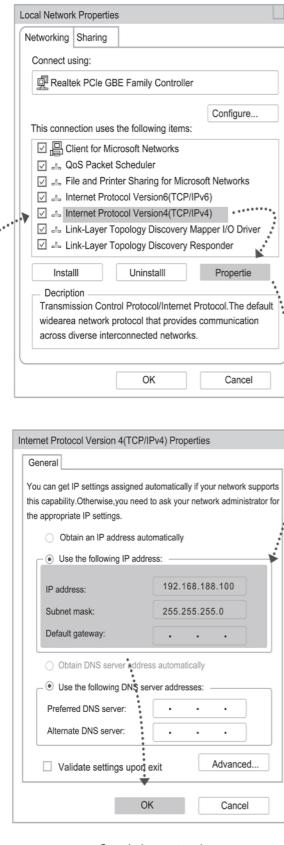
1.PC configuration if PC connect CPE by wireless

Set PC wireless network IP to 192.168.188.x (x: 2--250), same network segment as CPE, subnet mask: 255.255.255.0:



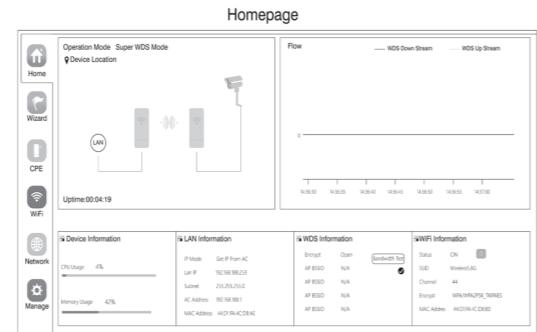
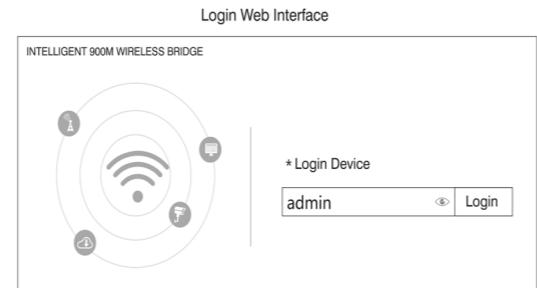
Check wireless connection

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 <http://192.168.188.253>, pop up the login page shown below, input the login password: admin, enter into the home page.



Set wireless network

3. Bridge Status

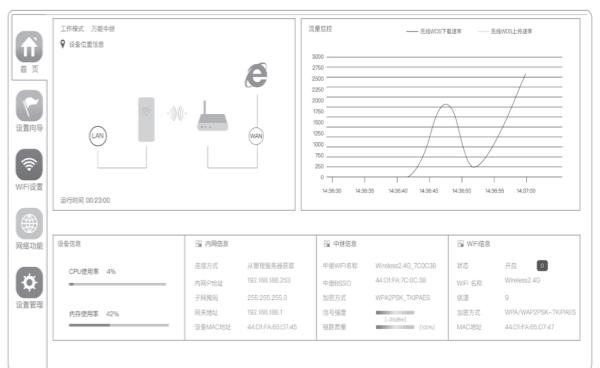


► Repeat mode

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

► AP mode

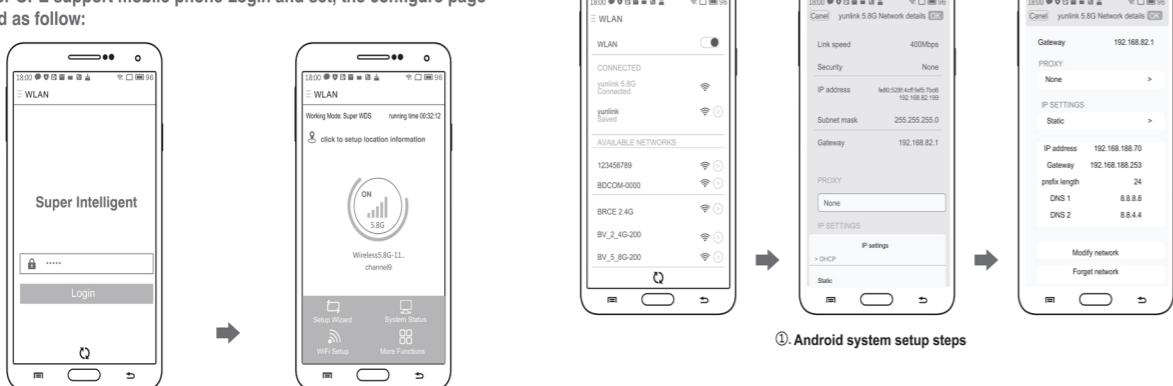
In this mode, NAT, DHCP, firewall, and all WAN-related functions are turned off. All wireless and wired interfaces are bridged together, regardless of LAN and WAN



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 192.168.188.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 mark ①, 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 192.168.253 on the internet explorer bar, input admin to login the mobile configuration page.

4. Channel Table

Wireless Bridge Regional Channel Code Instructions

Regional Code	5G Channel	
ETSI	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)
	5.340GHz	(Channel 104)
	5.360GHz	(Channel 112)
	5.380GHz	(Channel 116)
	5.400GHz	(Channel 120)
	5.620GHz	(Channel 124)
	5.640GHz	(Channel 128)
	5.660GHz	(Channel 132)
	5.680GHz	(Channel 136)
	5.700GHz	(Channel 140)
China	5.785GHz	(Channel 153)
	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)
	5.345GHz	(Channel 149)
	5.375GHz	(Channel 153)
	5.395GHz	(Channel 161)
	5.415GHz	(Channel 165)
ETSI	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)
	5.340GHz	(Channel 104)
	5.360GHz	(Channel 112)
	5.380GHz	(Channel 116)
	5.400GHz	(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)

Please note: Default Regional Code is China

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 is wrong direction, weak signal	1. Use Wi-Fi analysis to choose the best channel 2. Change to 5G CPE 3. CPE should be in normal distance and avoid bar 4. 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-enter 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. Check LAN Connection and Ethernet cable 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 4. Check if voltage is normal, if socket has problem, if input voltage of POE adapter is normal	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 over 7 days, reboot it 3. After lightning, device POE port broken or unstable, better to deploy lightning conductor	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