

Longevity LGAP300

5.8GHz

Wireless AP



User Manual

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Important Safeguards and Warnings

Please read the following safeguards and warnings carefully before using the product in order to avoid damages losses and body injuries.

Electrical Safety Information

- ✧ This product uses 48V POE as power source. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.
- ✧ There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
- ✧ Do not use this product in location that can be submerged by water.
- ✧ Do not install this product during an electrical storm. There may be a risk of electric shock from lightning.

Notice Information

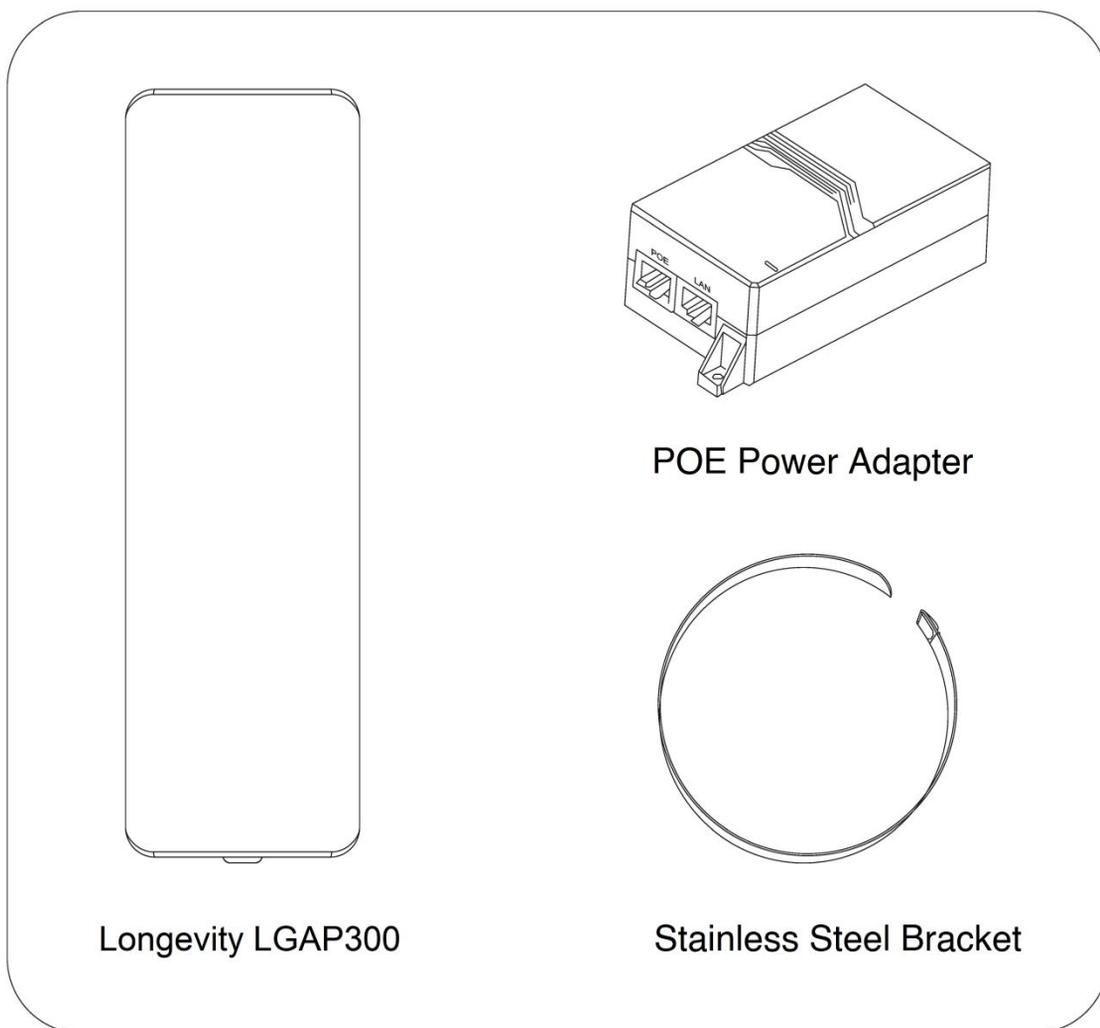
- All the designs, software and instructions here are subject to change without prior written notice.
- We would not be responsible for any damages and losses caused by improper operations or installation. Do not allow non-authorized or unqualified personnel with any kind of intervention to the product.
- All trademarks and registered trademarks are the properties of their respective owners.
- Please visit our website www.rhinoco.com.au for more information.

Introduction

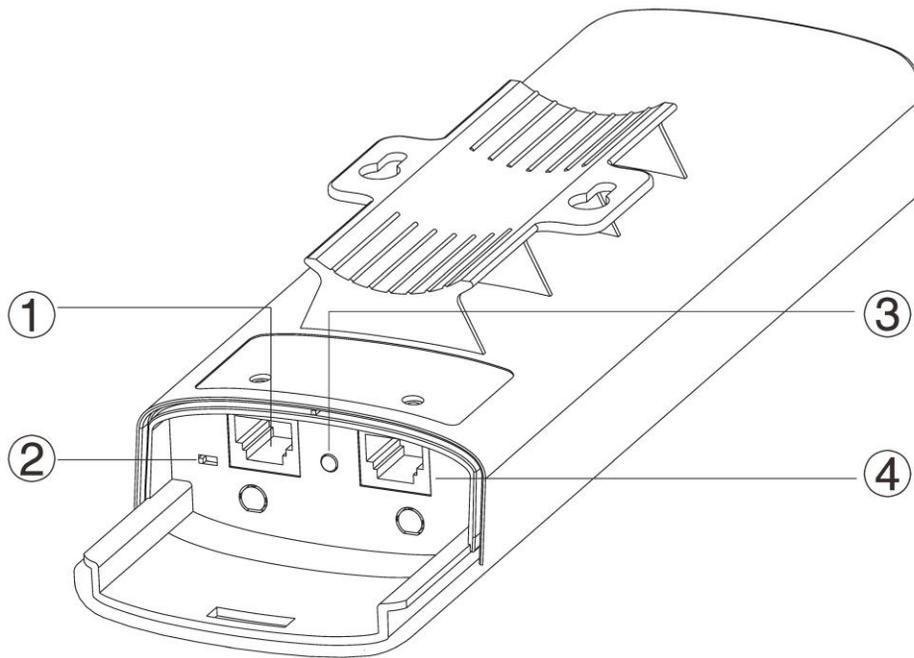
Longevity LGAP300 is designed for long distance transmission of IP packets which is commonly used in PC network and network cameras. It has four working modes: Access Point, Bridge, Repeater and Router.

Package Contents

Confirm that the following parts are included:



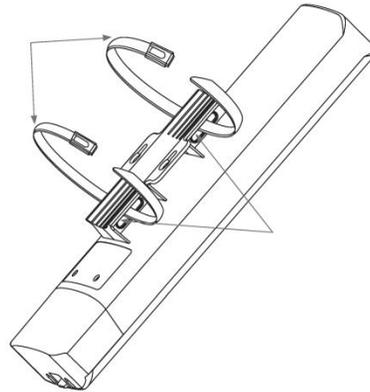
Device Layout



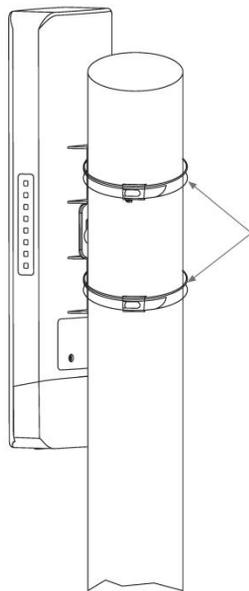
- ① LAN Port: For connecting your PC or other Ethernet network devices.
- ② Power Switch: Slide switch to left to supply power to other devices.
- ③ Reset: Press and hold for 5s to reset the router to its factory default settings
- ④ WAN Port: For connecting to a DSL/Cable modem, or an Ethernet jack.

Installation - Pole mounting

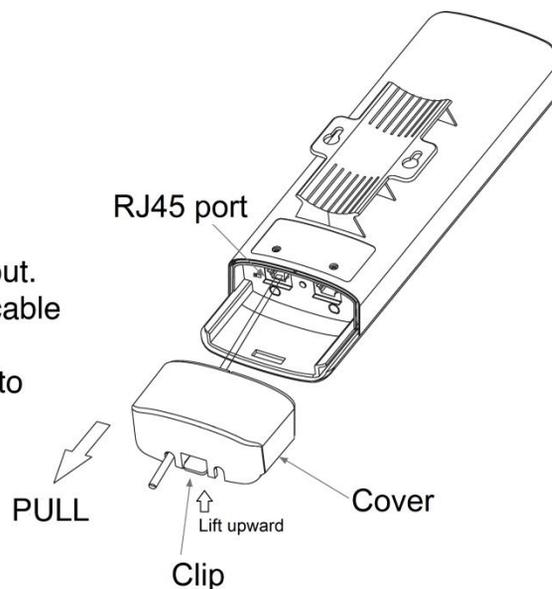
- ① Install the brackets as shown.



- ② Align the device on the pole and then fasten the brackets.

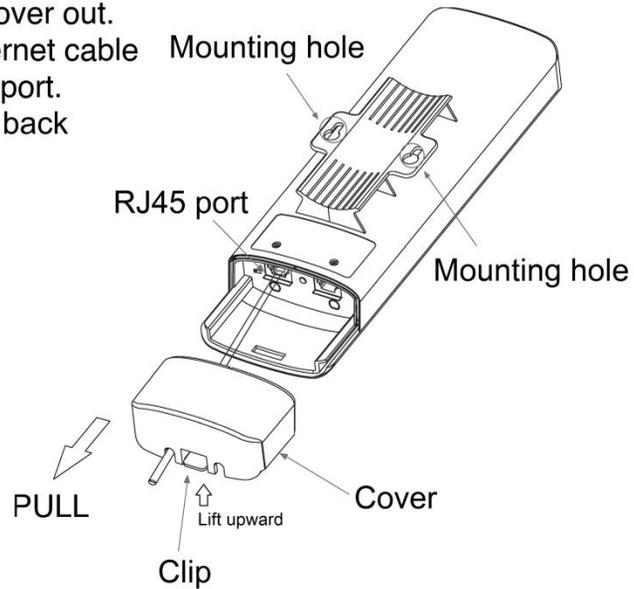


- ③ Lift the clip upward and pull the cover out. Insert an Ethernet cable into the RJ45 port. Put the cover back to finish installation.

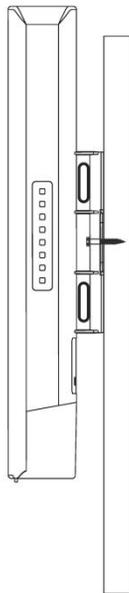


Installation - Wall mounting

- ① Lift the clip upward and pull the cover out. Insert an Ethernet cable into the RJ45 port. Put the cover back when done.

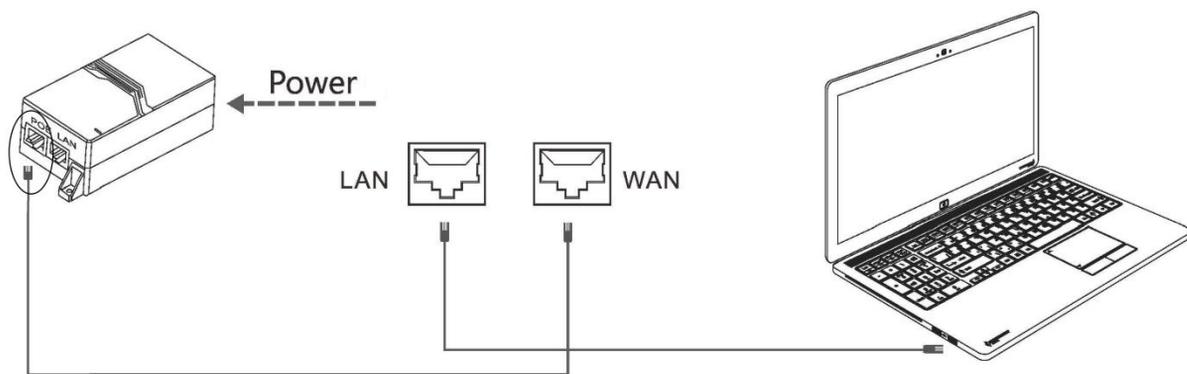


- ② Mount the device by two screws firmly.

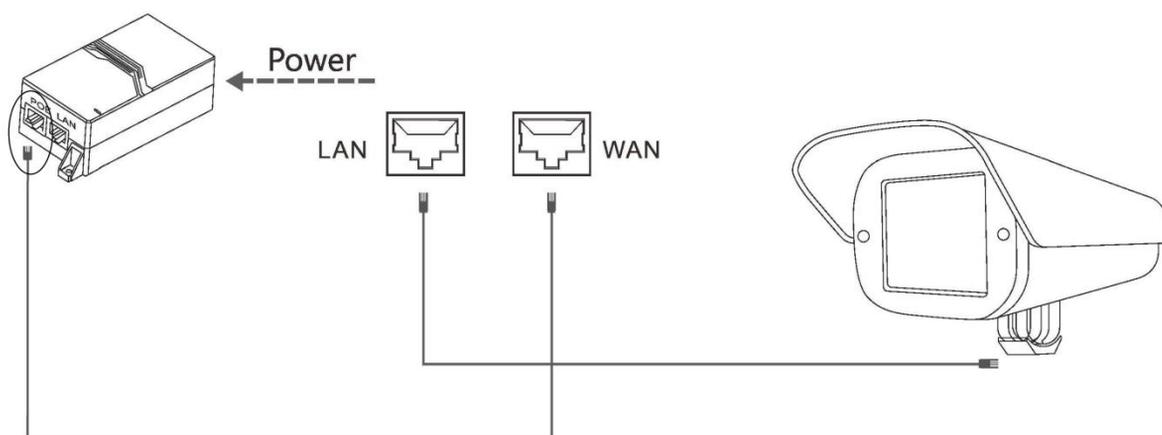


Connection Diagram

1. Connect the power cord to the power connector on the back of the POE injector. Plug the other end of the power cord into an AC (mains) power outlet.
2. Connect the LAN port of the Longevity LGAP300 to your PC/Laptop or IP camera's Ethernet port with an Ethernet cable.
3. Connect the WAN port of the Longevity LGAP300 to the POE port of the POE injector with an Ethernet cable.



Connect to PC/Laptop



Connect to an IP camera

Device Setup

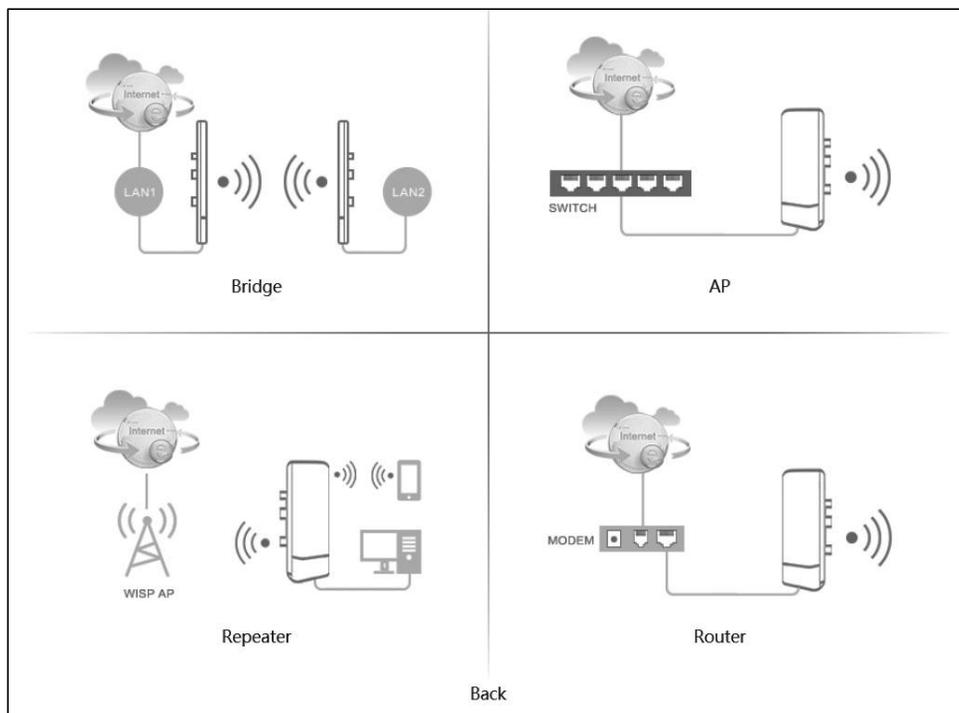
1. Connect the device as shown above.
2. Change the IP address of your PC/Laptop to 192.168.10.199. (Other number except 192.168.10.1 may also work)
3. The default IP address of the device is 192.168.10.1. Open your web browser and type 192.168.10.1 into the address bar of your browser and press <ENTER>.

Note: If the browser is not working properly, clear the cache and cookies data of the browser. Restart the browser and try again. (Internet Explorer or Microsoft Edge is recommended)

The screenshot shows a web browser window with a white background. At the top, there is a text input field containing the text "Please Enter Password". Below this field is a button labeled "Login".

4. Input the password and click **Login**. The default password is **admin**.
5. Click the **Wizard** icon on the left panel to select operating mode.

Longevity LGAP300 has 4 working modes: **Bridge**, **Access Point (AP)**, **Repeater** and **Router**.



Mode	Function
Bridge	Connect two network segments wirelessly
AP (Access Point)	When connects to a wired router or switch with internet access, it creates a wireless local area network (WLAN) for other devices such as mobile phones, laptops etc.
Repeater	It repeats signal from a wireless router or wireless access point and rebroadcasts the signal to other wireless devices.
Router	It provides access to the Internet or a private wireless computer network (WLAN).

Bridge Mode (Station - Secondary Site)

- i. Change the IP address and subnet mask if required then click **Next** to continue.

Scene : Secondary Site



Lan Settings

IP Address
Can Not Conflict With The Superior IP

Subnet Mask

Next

- ii. Click **Scan** to scan all available WiFi signal. (Only 5G WiFi signal will be displayed.)

Scene : Secondary Site



Bridge Settings

STA SSID **Scan**

Password

Launch Range

Prev **Next**

- iii. Click  to select the WiFi to be bridged.

Scene : Secondary Site

Bridge Settings

Wireless Settings

Scan Result **Refresh**

No.	BSSID	SSID	Channel	Operate
1	20:0D:80:72:47:6C	Longevity COM008	52	

Launch Range

Prev **Next**

iv. Input the WiFi password of the select WiFi and click **Finish** to complete setup.

Scene : Secondary Site



Wireless Settings

Local SSID	<input type="text" value="Longevity COM008"/>
Password	<input type="password" value="xxxxxxxx"/>
Power	<input type="text" value="100%"/>

Prev **Finish**

Access Point (AP) Mode

- i. Change the IP address and subnet mask if required then click **Next** to continue.

Scene : AP

The screenshot shows a progress bar at the top with two steps: '1 Lan Settings' and '2 Wireless Settings'. The 'Lan Settings' step is active. Below the progress bar, there is a tab labeled 'Lan Settings'. The main content area contains two input fields: 'IP Address' with the value '192.168.10.1' and 'Subnet Mask' with the value '255.255.255.0'. A 'Next' button is located at the bottom right of the form.

- ii. Enter a unique wireless network name (SSID) in the Local SSID field and then a 8-32 characters password. Leave other settings as default values.

Scene : AP

The screenshot shows a progress bar at the top with two steps: '1 Lan Settings' and '2 Wireless Settings'. The 'Wireless Settings' step is active. Below the progress bar, there is a tab labeled 'Wireless Settings'. The main content area contains several configuration fields: 'Local SSID' with the value 'My WiFi', 'Password' with the value 'xxxxxxxx', 'Bandwidth' with a dropdown menu set to '80MHz', 'Country' with a dropdown menu set to 'China', 'Channel' with a dropdown menu set to 'auto', and 'Power' with a dropdown menu set to '100%'. At the bottom, there is a 'Launch Range' slider with a '2Km' label. A 'Prev' button and a 'Finish' button are located at the bottom right of the form.

- iii. Click **Finish** to complete setup.

Repeater Mode

- i. Change the IP address and subnet mask if required then click **Next** to continue.

Scene : Repeater

Progress: ① Lan Settings — ② Repeater Settings — ③ Wireless Settings

Lan Settings

IP Address:

Subnet Mask:

Next

- ii. Click **Scan** to scan the WiFi to repeat.

Scene : Repeater

Progress: ① Lan Settings — ② Repeater Settings — ③ Wireless Settings

Repeater Settings

STA SSID:

Password:

Prev Next

- iii. Click  to select the WiFi to repeat.

Scene : Secondary Site

Bridge Settings

Wireless Settings

Scan Result

No.	BSSID	SSID	Channel	Operate
1	20:0D:B0:72:47:6C	Longevity COM008	52	

Refresh

Password:

Launch Range:

Prev Next

iv. Input the WiFi password of the select WiFi and click **Finish** to complete setup.

Scene : Repeater



Wireless Settings

Local SSID	<input type="text" value="My WiFi"/>
Password	<input type="password" value="xxxxxxxx"/> X
Power	<input type="text" value="100%"/> v

Prev **Finish**

Router Mode

Select the internet connection type: PPPoE, Static - Static IP or DHCP.

i. PPPoE Mode

1 Network Setup 2 Wireless Settings

Wan Settings

PPPoE Static DHCP

User

Password

Service Name X

Lan Settings

IP Address

Subnet Mask

Next

ii. Static IP

Input the static IP address for the router then Click **Next** to continue.

1 Network Setup 2 Wireless Settings

Wan Settings

PPPoE Static DHCP

IP Address

Subnet Mask

Gateway

DNS X

Lan Settings

IP Address

Subnet Mask

Next

Input the SSID in **Local SSID** and customize the password in **Password**. Click **Finish** to complete setup.

1 Network Setup 2 Wireless Settings

Wireless Settings

Local SSID

Password

Bandwidth ▼

Country ▼

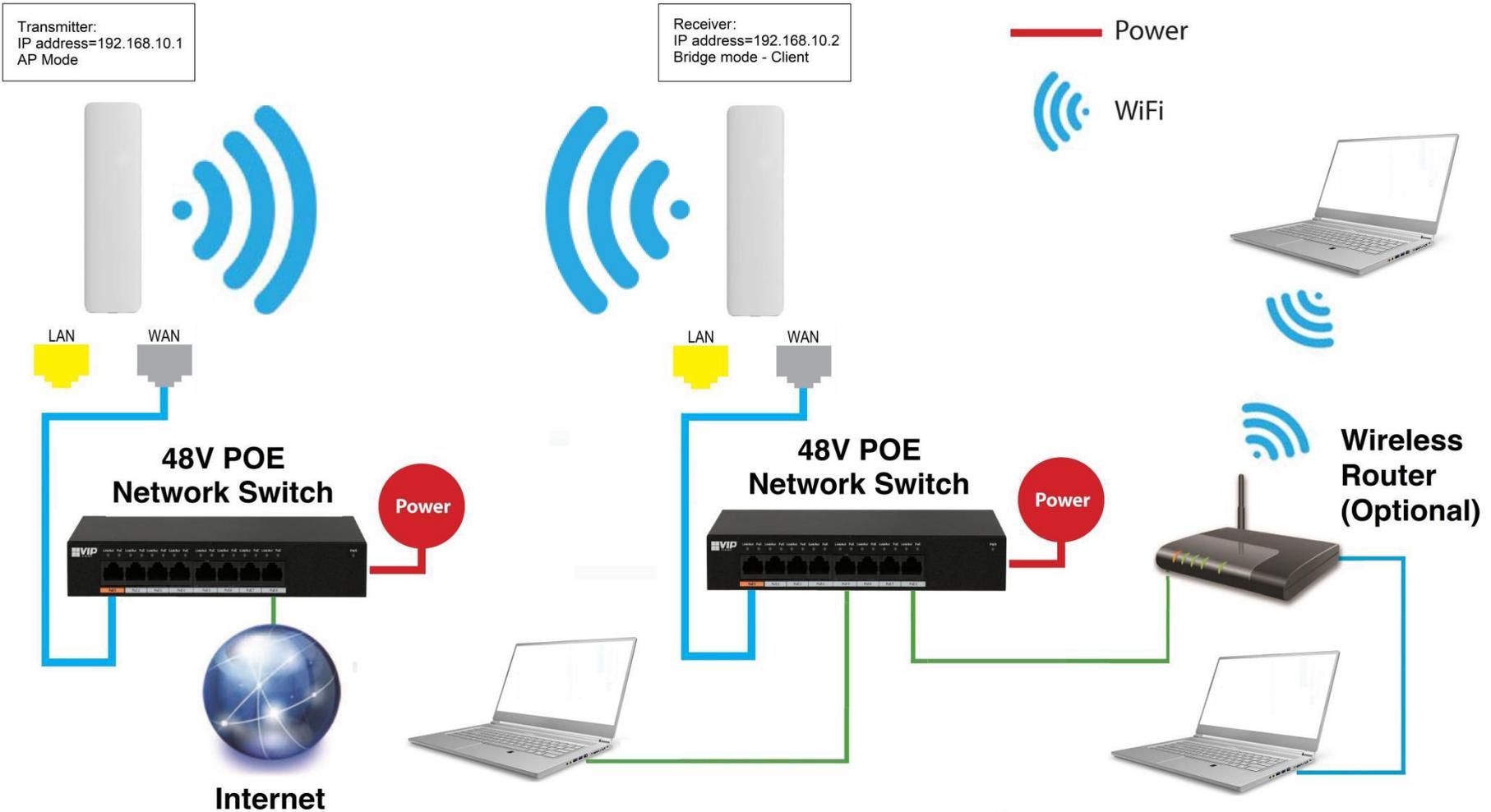
Channel ▼

Application 1 - Network Extender using Bridge Mode

In this example, one device works in AP(Access Point) mode and another one works in Bridge mode(Client).

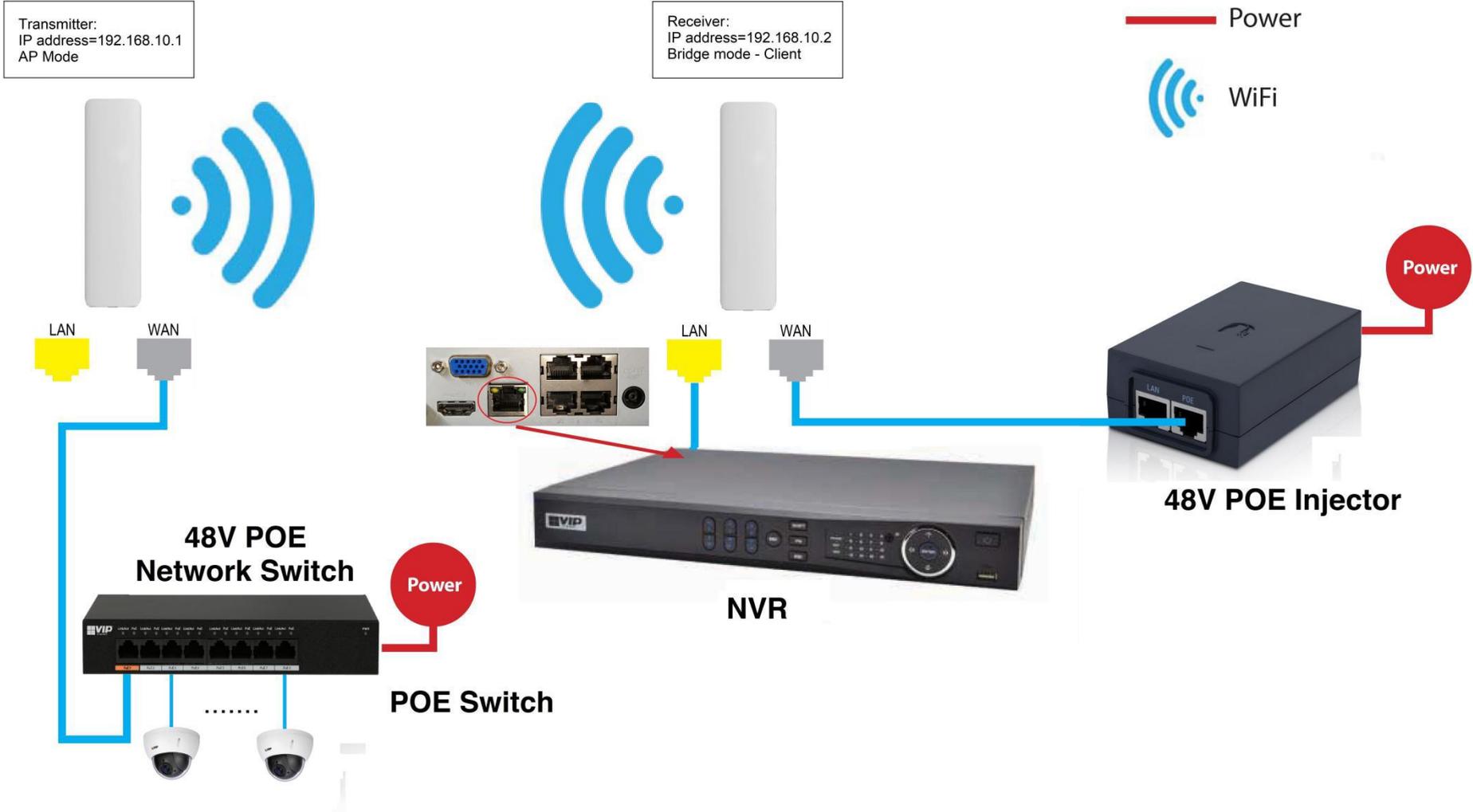
Note: Must use different IP address for the AP(Access Point) and Bridge client.

Quick connection diagram



Application 2 - Network Video Recorder + Camera

Quick connection diagram



Installation Considerations

Mounting Height: For optimum performance, make sure a clear line of sight between the transmitter and receiver. An elevated location is recommended. Obstacles like trees, buildings and large steel structures will weaken the wireless signal.

Orientation: Make sure the transmitter and receiver is installed face-to-face to achieve maximum performance.

FAQs

Q: Do I need a power supply for the transmitter/receiver?

A: No, you don't. The transmitter/receiver is powered by 48V POE. Use a CAT5e/CAT6 cable, connect the WAN port to a 48V POE network switch or a 48V POE injector supplied. Connect the LAN port to the network device.

Q: How to reset the device?

A: Press and hold the RESET button for 5 seconds when power is on.

Q: I configured the AP as network bridge. How can I test the connection?

A: You can ping both the transmitter and receiver.

For example, if the transmitter address is 192.168.10.1 and those of receiver is 192.168.10.2:

- i. Change the IP address of the PC to 192.168.10.xx where xx=3 to 255. Change the subnet mask to 255.255.255.0
- ii. Ping the receiver side first (because the receiver is connected to the PC):
In Command mode, type: **ping 192.168.10.2 <ENTER>**
If the connection is successful, it will reply as follow:

```
Pinging 192.168.10.2 with 32 bytes of data:  
Reply from 192.168.10.2: bytes=32 time<1ms TTL=64  
Reply from 192.168.10.2: bytes=32 time=1ms TTL=64  
Reply from 192.168.10.2: bytes=32 time<1ms TTL=64  
Reply from 192.168.10.2: bytes=32 time<1ms TTL=64
```

```
Ping statistics for 192.168.10.2:  
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Note: Make sure 0% loss as the receiver is connected to the PC direct, it should get 100% hit rate (0% loss).

The connection between the PC and the receiver is established.

Now test the connection between the transmitter and receiver:

- iii. In Command mode, type: **ping 192.168.10.1 <ENTER>**
If the connection is successful, it will reply as follow:

```
Pinging 192.168.10.1 with 32 bytes of data:  
Reply from 192.168.10.1: bytes=32 time<1ms TTL=64  
Reply from 192.168.10.1: bytes=32 time=1ms TTL=64  
Reply from 192.168.10.1: bytes=32 time<1ms TTL=64  
Reply from 192.168.10.1: bytes=32 time<1ms TTL=64
```

```
Ping statistics for 192.168.10.1:  
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Note: The ideal case is to have 100% hit rate (0% loss). If not, adjust the CPE's orientation, height and distance to achieve the best performance.

You can also test the connection continuously by typing: **ping 192.168.10.1 -t <ENTER>**

Press **Ctrl-C** to stop testing.

Type **exit** to return to Windows platform.

Q: What is the default password for the web interface?

A: The default password is "**admin**".

Q: Web browser displays incorrectly.

A: Clear the cache and cookies data of the browser. Close the browser and open again.