



WiFi Bridge

IN-BR3



Installation Manual

How to install wifi bridge and how to configure it



What did you buy?

You have purchased a WiFi Bridge that allows you to bring a wired Ethernet network to a distant site via wireless transmission. The bridge consists of two units: a transmitter (AP), from connect to the original network, and a receiver (STA) to connect to the remote network.

The bridge is great for connecting IP cameras distant from the main system with a wireless connection. You can also use them to extend your network by carrying it wirelessly to an adjacent building.

Wifi bridges are designed to work without obstacles between the two antennas. The maximum range of the bridge, in the absence of obstacles, is approximately 3km, in optimal conditions.

INCLUDED IN THE PACKAGE

- WiFi Bridge (2 items)
- 2pcs.POE injectors
- Pole Mounting Straps



Wiring

This wifi bridge is composed of two elements that **they are already paired from the factory** For communicate with each other and do not require any software configuration. You just have to be careful to connect them correctly to the two networks, the main one and the remote one.

Both **The modules accept POE power supply 48V**. If you connect them to a POE switch, they they will turn on as soon as you connect the network cable. If you connect the modules to a non-POE switch, or to a router, you need to supply power with the included power supplies/injectors.

The two elements are identical and differ only in the position of the STA- function selector AP. Do not change the position of this selector because the two modules are already pre-configured.

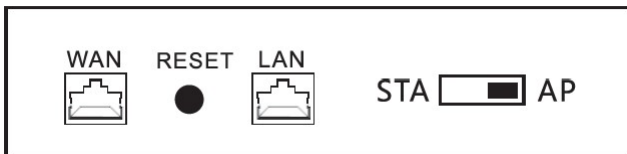
The AP module must be installed in the original network, the STA module in the remote network.

Each module has a LAN port, to connect the network, and a WAN port to connect

The included power supply/injector when not connecting the module to a POE switch.

Below are the connection instructions.

AP (transmitter) – CONNECTED TO THE ORIGINAL NETWORK



CONNECTING TO NETWORK POE SWITCH (power supplied by POE switch)

LAN – Connect the POE network switch

CONNECTION TO NON POE SWITCH OR ROUTER (power supply with injector included)

LAN – Connect non-poe network switch or router

WAN – Connect the POE port of the included injector

STA (receiver) – CONNECTED TO REMOTE NETWORK



CONNECTING TO NETWORK POE SWITCH (power supplied by POE switch)

LAN – Connect the POE network switch

INSTALLATION MANUAL

IN-BR3 – WiFi Bridge



Page:4

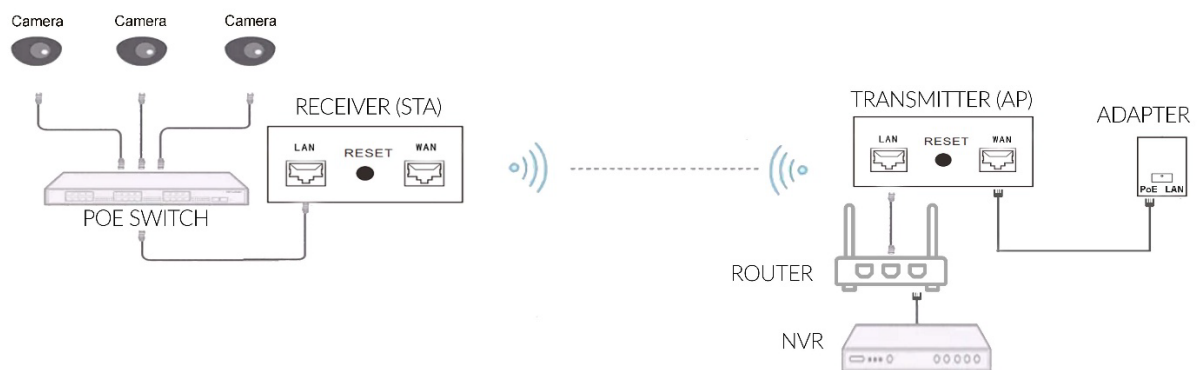
CONNECTING TO NON-POE SWITCHES OR CLIENT DEVICES (power injector included)

LAN – Connect non-poe network switch or devices such as IP camera, PC or wifi AP

WAN – Connect the POE port of the included injector

Installation example

Router and NVR in main network | Poe switch with cameras in remote site



Assembly

These wifi bridges are equipped with a rear fixing bracket



The bracket allows for wall mounting or even a round pole using the included cable ties in the package.

The transmit antennas are internal.

The position where you will install the modules is very important because the maximum range of transmission (up to 3km) is only possible in the total absence of obstacles. Any obstacle that is interpose between the 2 modules of the bridge drastically reduces its range. For this reason if you want to reach distant sites, it is best to mount the modules outside and in a high position, ideally on the roof of the building, so that the two antennas can “see” each other.



First ignition and Self-coupling

These wifi bridges have an auto-pairing system that avoids having to configure them manually with the computer. Auto-pairing occurs at the first switch-on, when the two units search for each other for a period of 30 minutes. If the AP unit detects the signal of the STA unit i two modules will automatically pair and remain paired on subsequent starts.

For auto-pairing to be successful, it is essential that the first switch-on happen with **the two modules at a distance of no more than 10 metres** and without obstacles interposed. Once the coupling is completed, you can proceed to install them in the position real work.

To delete an existing pairing you can reset both modules and perform a new auto-pairing at the next power-on.



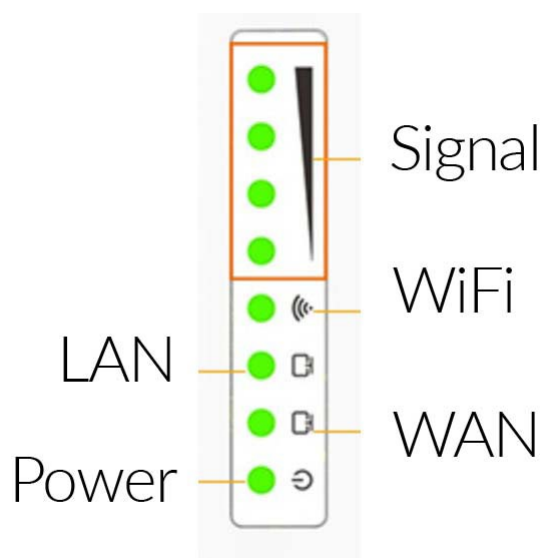
Antenna orientation

These wifi bridges have internal directional antennas thanks to which they can reach long distances. When installing the two modules you must orient them in the direction of each other in so that they ideally look at each other. You can orient the modules only visually, without excessive precision in alignment, because the antennas have a signal diffusion angle of about 60°.

Wifi bridges are designed to work without obstacles. If you put obstacles between the antennas, even just trees or bushes, the maximum range is drastically reduced up to make the presence of antennas unnecessary and return to the normal range of a standard wifi AP.

LED indication

Both bridge modules are equipped with a side panel with indicator LEDs.



SIGNAL –

- 4 bars: Strong signal
- 3 bars: Good signal
- 2 bars: Sufficient signal
- 1 bar: Poor signal

Notch 1 and 2 are red to indicate that the bridge's wifi signal is not optimal

WIFI – In the AP unit indicates the generated wifi network

LAN-WAN – Data traffic on LAN/WAN network ports

POWER – Power present



Local WiFi (AP only)

The AP module generates its own local wifi network that you can detect by exploring wifi with your phone.

Normally this wifi network is not used to access the network because it is in the network main, where you almost always already have a wifi hotspot, for example in the router.

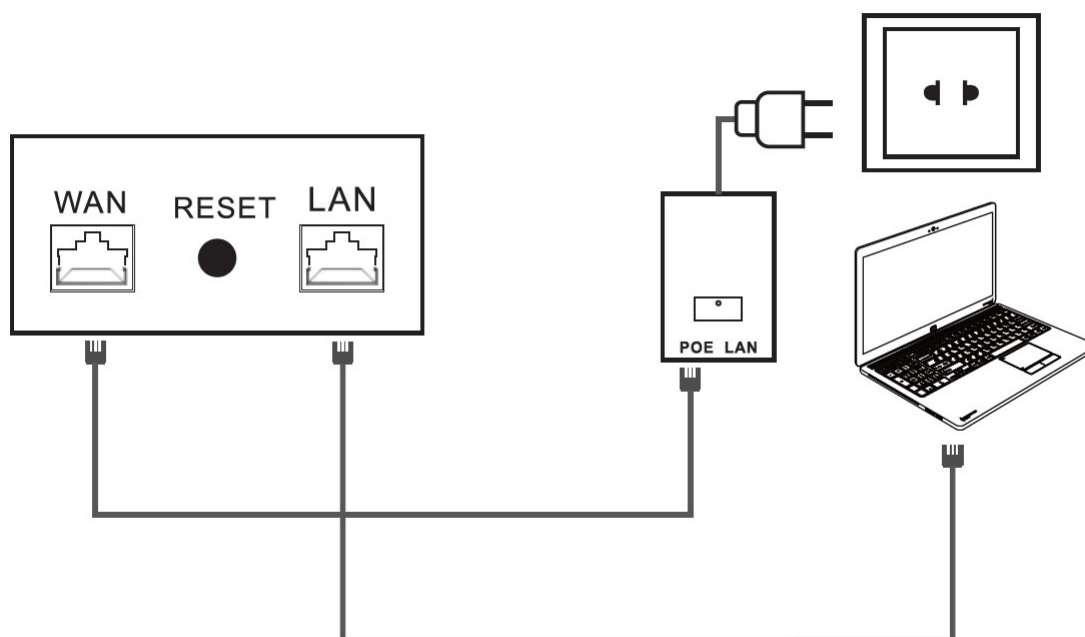
If for some reason you want to use this wifi network to access with cell phones, tablets etc.

You can change the name (SSID) and password in the advanced configuration (see chapter following)

Advanced configuration

These bridges do not require any configuration because they are supplied already configured. The AP/STA selector already perfectly sets the transmitter module and the remote receiver.

If for any reason you need to change these pre-configured settings, for example to use the product in other ways, you can do this by connecting to a computer and using the browser to connect to the module's factory address **192.168.10.1** with password of access: **admin**





Resetting devices

The reset button on the two modules should never be used because the two elements are already paired from the factory and resetting them will lose this pairing. However, it can be necessary to use it in particular cases, for example if, due to a fault, you need to replace one of the two modules and therefore a new pairing must be performed.

Holding down the reset buttons on both modules for 10 seconds will eliminate the existing pairing and return the devices to factory mode, where they will try to mate when you first turn them on.