PHŒNIX CONTACT
INSPIRING INNOVATIONS

1 Unpacking

Open the carton and unpack the items. Your package should include:

- One FL WLAN 4321 A outdoor-rated wireless bridge Unit
- One FL WLAN 4321 B outdoor-rated wireless bridge Unit
- 2 x Passive PoE Injectors
- 2 x Power Supplies
- 2 x Pole Mounting kits

If any items are missing or damaged, notify your Phoenix Contact representative.

2 Supplying Power

All FL WLAN 4321 series models are Passive PoE Powered Devices and have no AC or DC power socket. Power is supplied through an Ethernet cable plugged into the RJ45 port (shown in the figure below). The cable must be connected to an inline PoE power injector (supplied). The maximum power consumption is 10 watts. The Power Supplies that come with the FL WLAN 4321 are 24VDC, 36W and have been tested over Ethernet up to 328 feet (100 meters) distance. The FL WLAN 4321 units themselves support DC input from 6-30V for customer supplied power options.

RJ-45 PoE Port
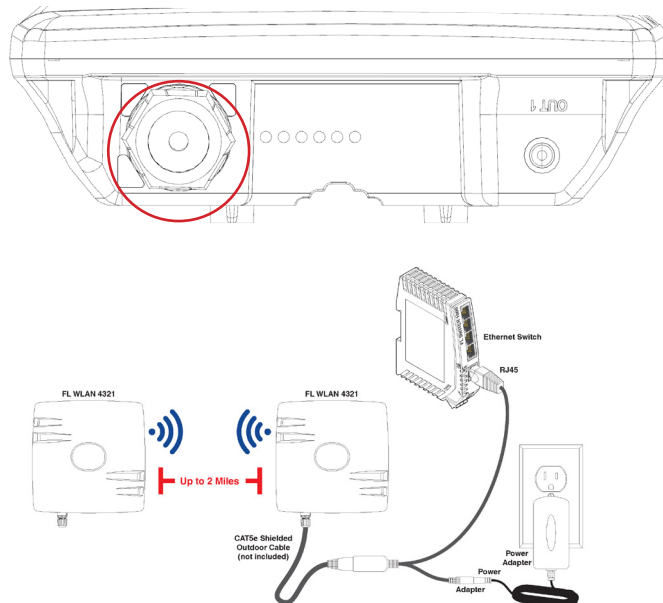
3 Physical Installation

NOTE: It is recommended to test all wireless devices before the final installation. This includes bench testing and signal testing of the FL WLAN 4321 unit in the positions where they will be mounted. Loosely mount FL WLAN 4321 units in the intended installation spots and ensure that the transmission signal is strong enough for the intended application.

The minimum and maximum recommended distance between FL WLAN 4321 A and FL WLAN 4321 B are 100 feet minimum to 2 miles maximum.

This product is designed for outdoor installation on a pole. It is recommended to install the FL WLAN 4321 at a height of at least 15 feet. A higher mounting position will result in a stronger signal, especially at longer distances. If there are obstacles between the FL WLAN 4321s, mount the FL WLAN 4321s at a higher distance to avoid the obstacles. Mount the FL WLAN 4321 with the Ethernet port and LEDs facing down.
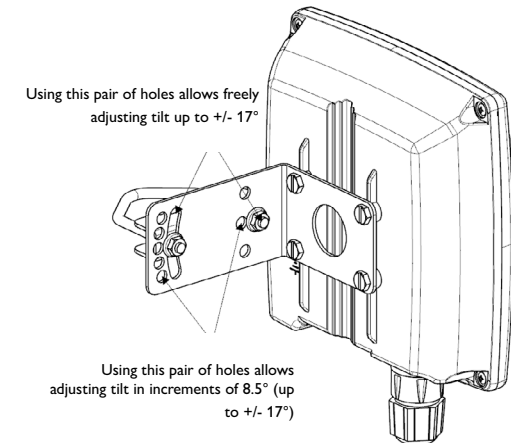
The FL WLAN 4321 Kit comes with a Pole Mount.

Pole Mount

1. Align the four holes on the housing bracket with those on the back face of the housing and use the four screws and lock washers to attach the bracket to the housing.
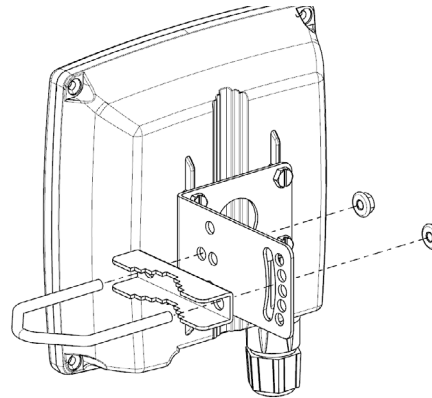
2. Position the Wireless unit and mount on the pole. Use the supplied U-Bolt and position the Wireless unit as shown in the graphic below. Once the wireless unit is in position, tighten the supplied nuts with washers to the U-Bolt until the Wireless unit is securely attached to the pole.

Using this pair of holes allows freely adjusting tilt up to +/- 17°

Using this pair of holes allows adjusting tilt in increments of 8.5° (up to +/- 17°)

FL WLAN 4321 Alignment

Once the FL WLAN 4321s are in place, adjust each individual unit to point directly at the opposite unit. The FL WLAN 4321 Outdoor Bridge indicates Wireless Signal strength using LEDs on the bottom of the unit.

- Left to Right adjustments are made by loosening the Pole mount and turning the unit left or right on the pole to align FL WLAN 4321 pairs
- Up and Down adjustments are made using the tilt screws in the Pole Mount Kit

Led Indicators

- System On LED is on once the unit is booted up and running
- Link activity shows Ethernet Activity
- Signal Strength

    - One LED lit indicates low signal strength.
    - Two LEDs lit indicate medium signal strength.
    - Three LEDs lit indicate high signal strength.
    - Four LEDs lit indicate very high signal strength.

Grounding

The FL WLAN 4321 Series is grounded internally to the screw that attaches to the Mounting kit. Attaching the mount to a grounded pole will also ground the Wireless unit.
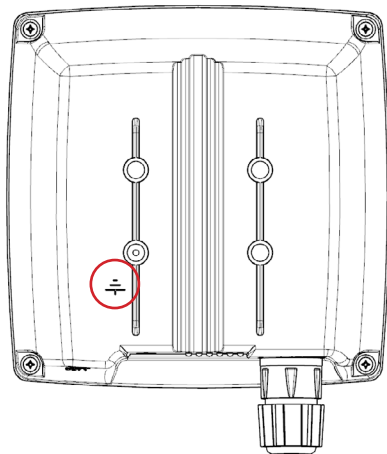
Ethernet Cable Requirements

The FL WLAN 4321 Outdoor Wireless Bridge requires Shielded Ethernet cables for outdoor use.

- Shielded CAT 5e or better
- Shielded Metal RJ45 Connectors

Contact your Phoenix Contact representative for Ethernet cables available designed specifically for the FL WLAN 4321 and other Phoenix Contact Wireless devices.

Surge Protection

In areas with a high incidence of lightning, it is suggested to install surge protection devices on the Ethernet cable from Phoenix Contact. This will protect the indoor network from damage caused by electrical surges through the data cable. Check your local electrical codes and contact your Phoenix Contact representative to find out more.