



2x2 MIMO Wi-Fi Dual Band Antenna

MOBILITY 02



The Peplink Mobility 02 is a dual-band (2.4GHz & 5GHz) Wi-Fi antenna built for mobile applications.

The Mobility 02 supports 2x2 MIMO and has a solid housing made of UV stable plastic materials. Two color options are available (black and white) to fit different deployments. For easier installation, the antenna comes with different cable length options, available in RP-SMA connector.



APPLICATIONS

- Transportation connectivity (trucks, busses, utility vehicles)
- Mining vehicles and machinery communications

FEATURES

- 2x2 MIMO Wi-Fi dual band antenna
- Wi-Fi frequencies: 2400-2500 MHz & 4900-6000 MHz
- Durable and UV-stable housing
- Black or white color options
- IP68 rated

ORDERING INFORMATION

MOBILITY 02

| Product Code | Description |
|-----------------|-------------------------------------------------------|
| ANT-MB-02-R-W-6 | 2xWi-Fi 2400-6000MHz, IP68, RP-SMA, White, 6.5ft / 2m |
| ANT-MB-02-R-B-6 | 2xWi-Fi 2400-6000MHz, IP68, RP-SMA, Black, 6.5ft / 2m |
| ANT-MB-02-Q-W-1 | 2xWi-Fi 2400-6000MHz, IP68, QMA, White, 1 ft / 0.3m |
| ANT-MB-02-Q-B-1 | 2xWi-Fi 2400-6000MHz, IP68, QMA, Black, 1 ft / 0.3m |

EXTENSION CABLE

| Product Code | Element type | Description |
|--------------|----------------|------------------------------------------------------------------------|
| EXC-RQ-15 | Wi-Fi elements | Extension coax cable, RP-SMA male to QMA female connector, 15ft / 4.5m |





SPECIFICATIONS

Wi-Fi

- **Antenna elements:** 2 elements
- **Cellular frequency bands:** 6.2dBi: 2400-2500 MHz, 7.3dBi: 4900-6000 MHz
- **VSWR:** < 2.0
- **Feed power handling:** 10W
- **Input impedance:** 50 Ω
- **Polarisation:** Linear

Cable

- **Type:** CFD-200
- **Length:** 6 ft 7 in. / 2m
- **Loss:** 0.33 dB/m @ 900 MHz, 0.49 dB/m @ 2000 MHz, 0.55 dB/m @ 2500 MHz, 0.87 dB/m @ 5800 MHz
- **Diameter:** 0.2 in. / 5.0mm
- **Jacket:** Half matt PVC, UV resistant
- **Termination:** RA-SMA male

Mounting

- **Supported types:** Panel, wall, pole
- **Mounting hole:** 1 11/16" / 43mm
- **Max panel thickness:** 19/32" / 15mm

Mechanical

- **Product dimensions:**
Height: 1.42 in. / 36mm (spigot not included)
Diameter: 5.12 in. / 130mm
- **Packaged dimensions:** 8.90 x 8.46 x 4.29 in. / 226 x 215 x 109mm
- **Radome material:** UV stable PC+ABS

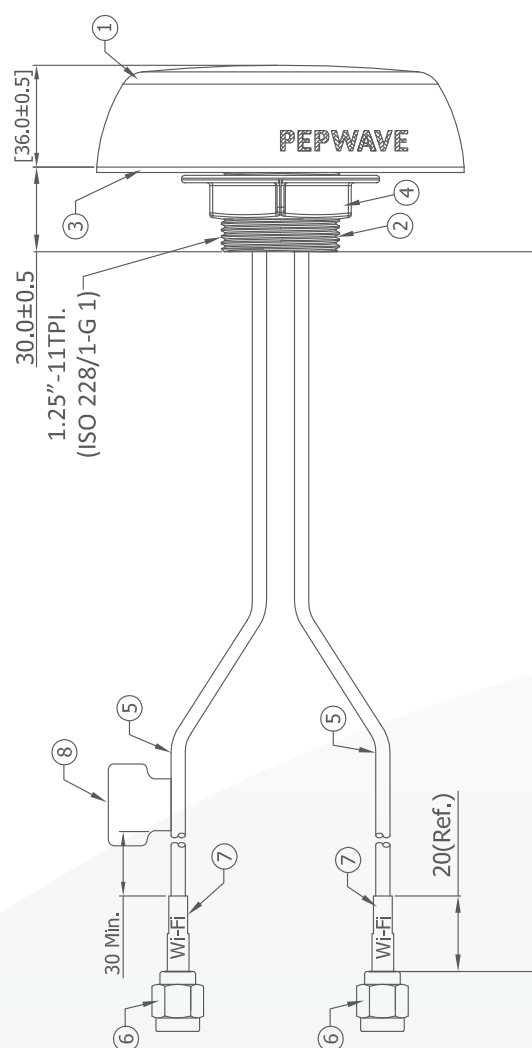
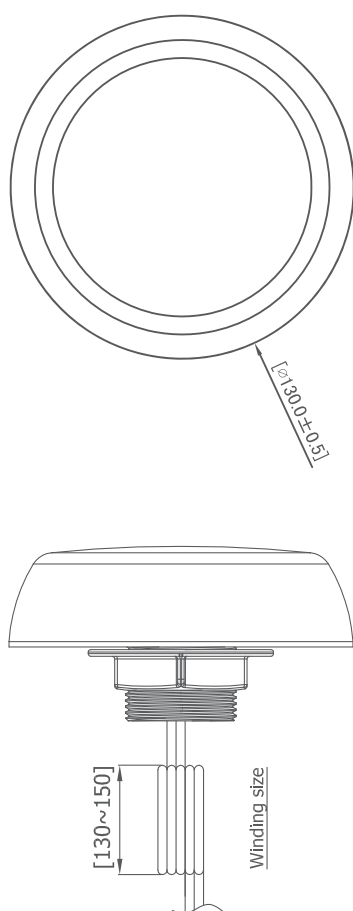
Package contents

- **Antenna:** Mobility 02
- **Mounting:** Mounting bracket, Wall/pole mount, Double sided 3M adhesive pad, Diameter: 5.08 in. / 129 mm, Thickness: 0.08 in. / 2 mm

Environmental, compliance

- **Cable flammability:** UL 758 (VW-1)
- **Compliance:** RoHS, REACH & WHEE
- **Enclosure flammability:** UL 94 HB
- **IP rating:** IP68
- **Operating temperature:** -40° - 80°C
- **Storage temperature:** -40° - 80°C
- **Salt Spray:** MIL-STD 810F/ASTM 8117
- **UV resistance rating:** UL 746C (F1, long-term UV exposure)
- **Wind Survival:** 220 km/h

TECHNICAL DRAWING

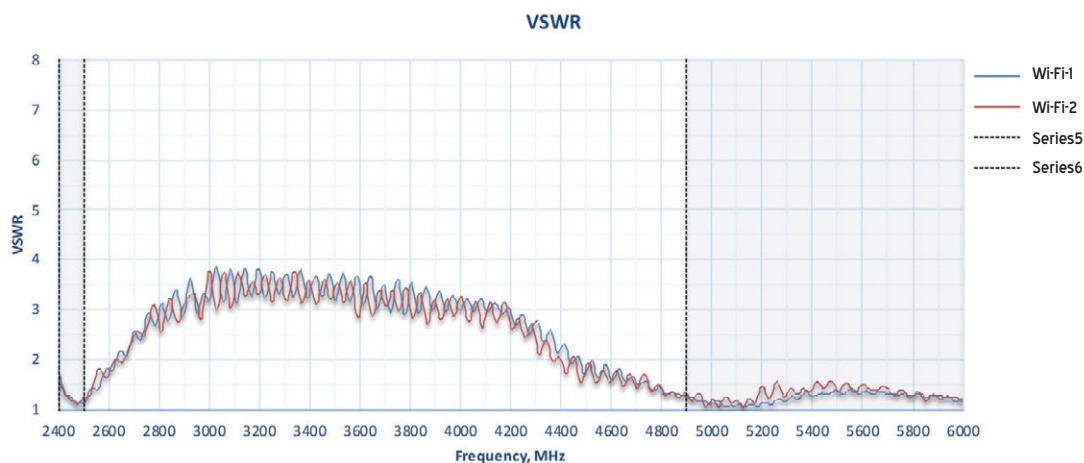


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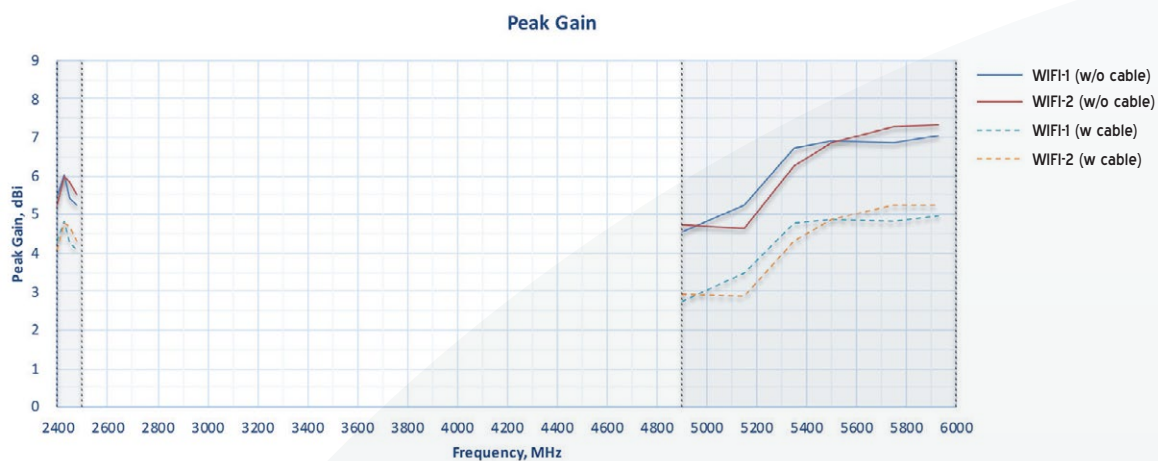
| No. | Description | Qty |
|-----|-------------------------------|-----|
| 1 | Antenna top cover (PC+ABS) | 1 |
| 2 | Antenna bottom cover (PC+ABS) | 1 |
| 3 | Double sided 3M adhesive pad | 1 |
| 4 | Hexagon NUT (PC+ABS) | 1 |

| No. | Description | Qty |
|-----|----------------------------------|-----|
| 5 | Cable CFD-200 | 2 |
| 6 | Connector (RP-SMA male) | 2 |
| 7 | Heat shrinking tube | 2 |
| 8 | Wi-Fi cable marking (blue color) | 1 |

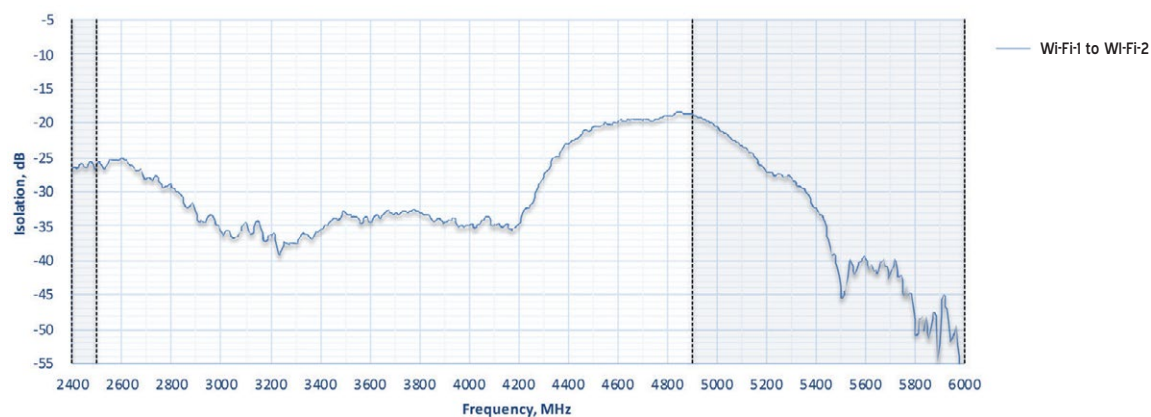
Wi-Fi Antenna VSWR



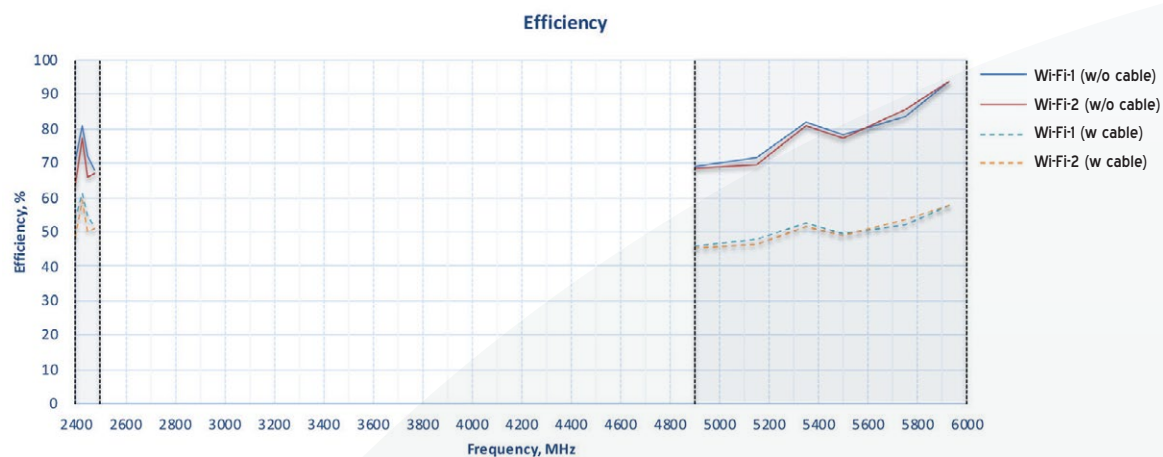
Wi-Fi Antenna Gain



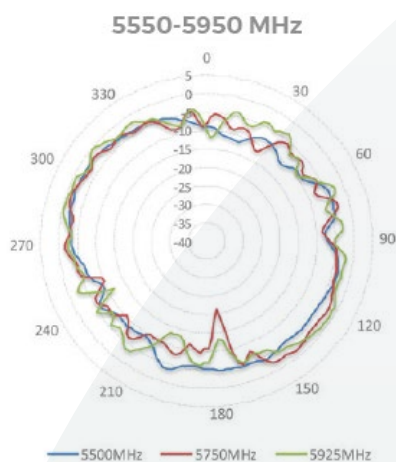
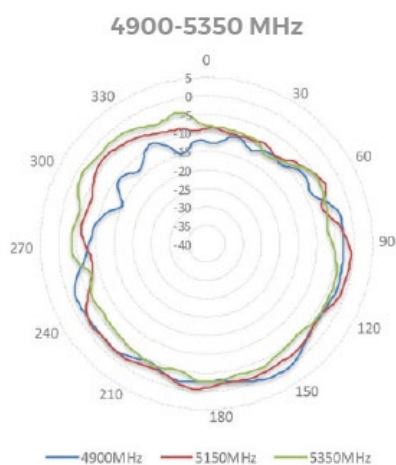
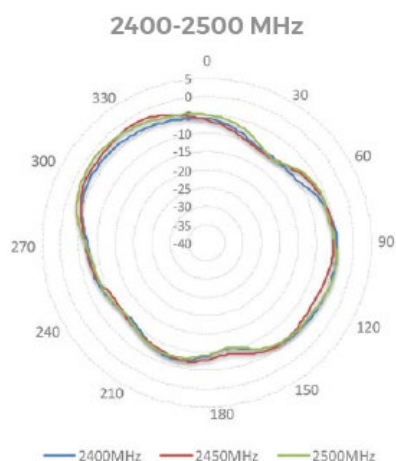
Wi-Fi Antenna Isolation



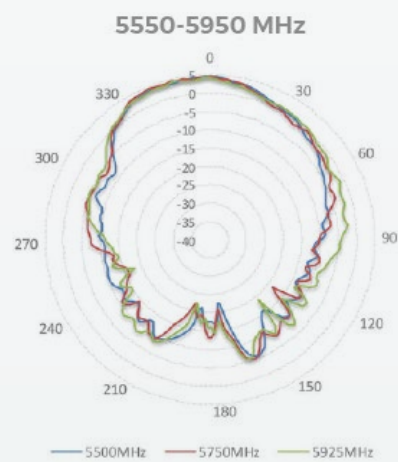
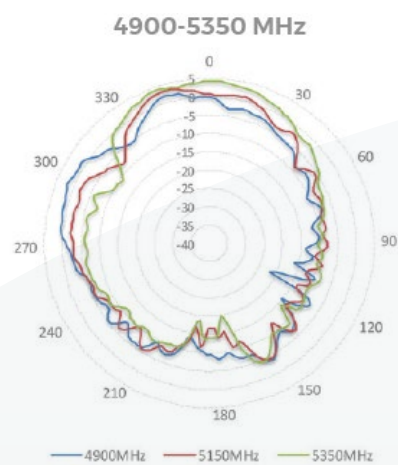
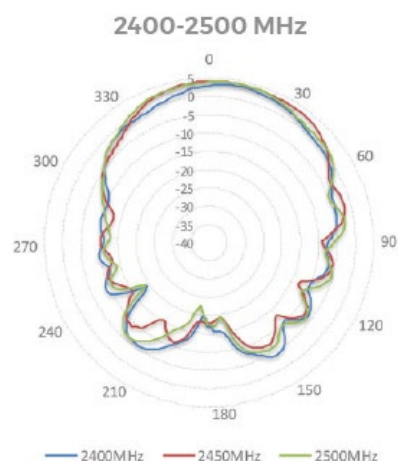
Wi-Fi Antenna Efficiency



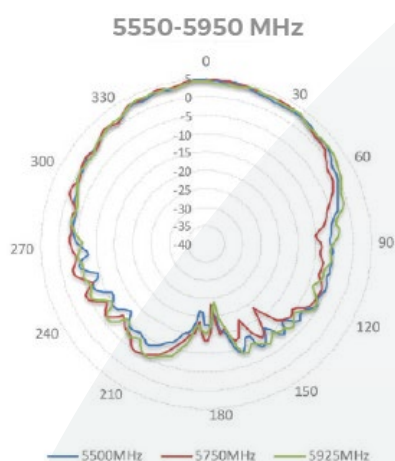
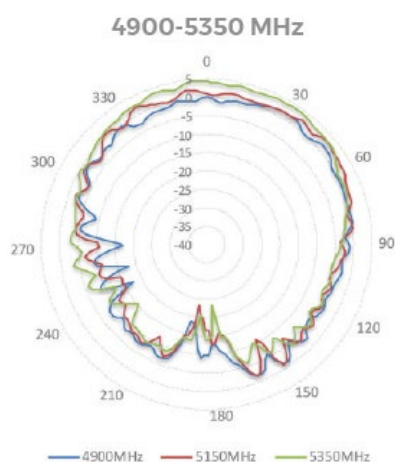
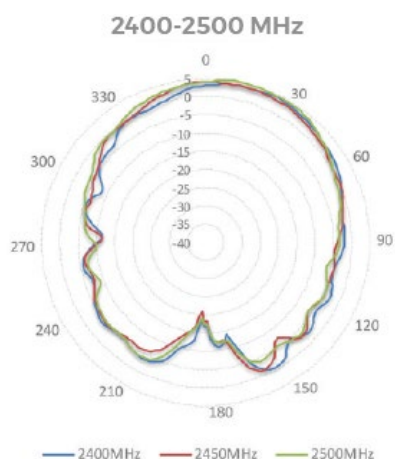
LTE/5G Antenna Radiation Patterns (Azimuth)



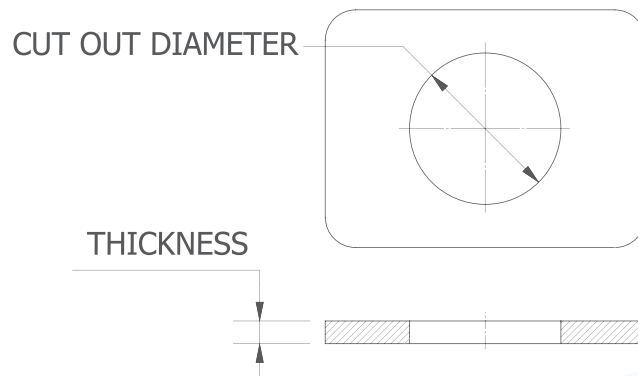
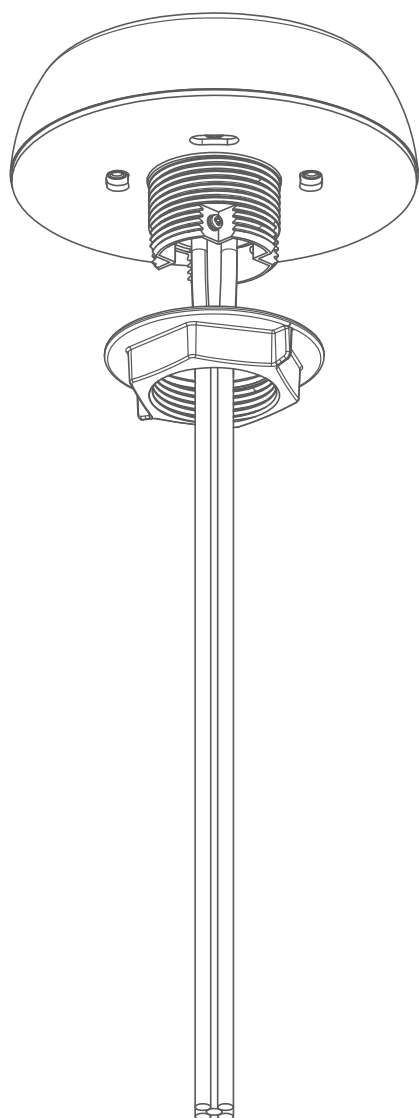
LTE/5G Antenna Radiation Patterns (Elevation 1)



LTE/5G Antenna Radiation Patterns (Elevation 2)



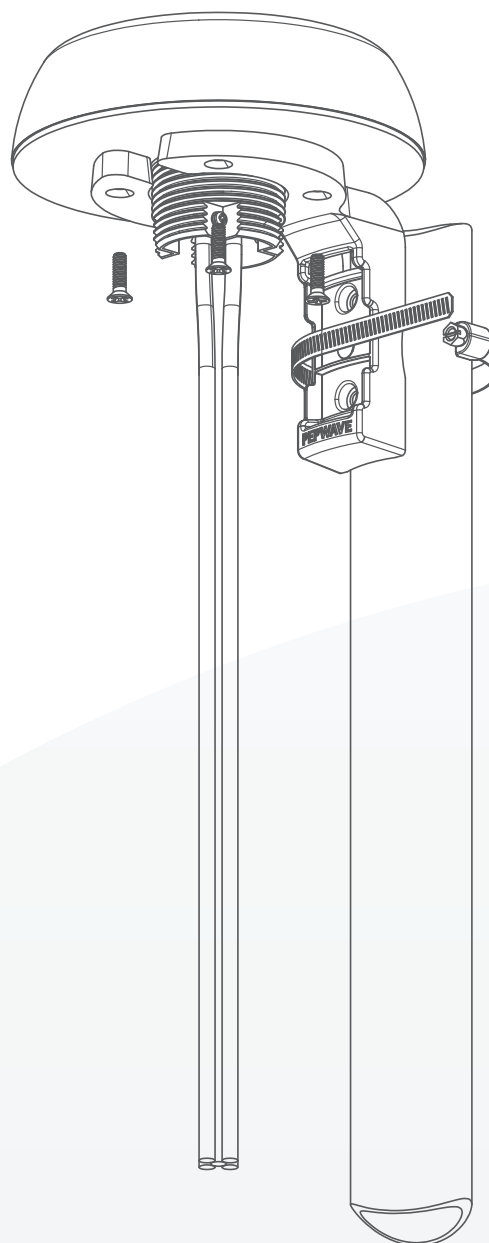
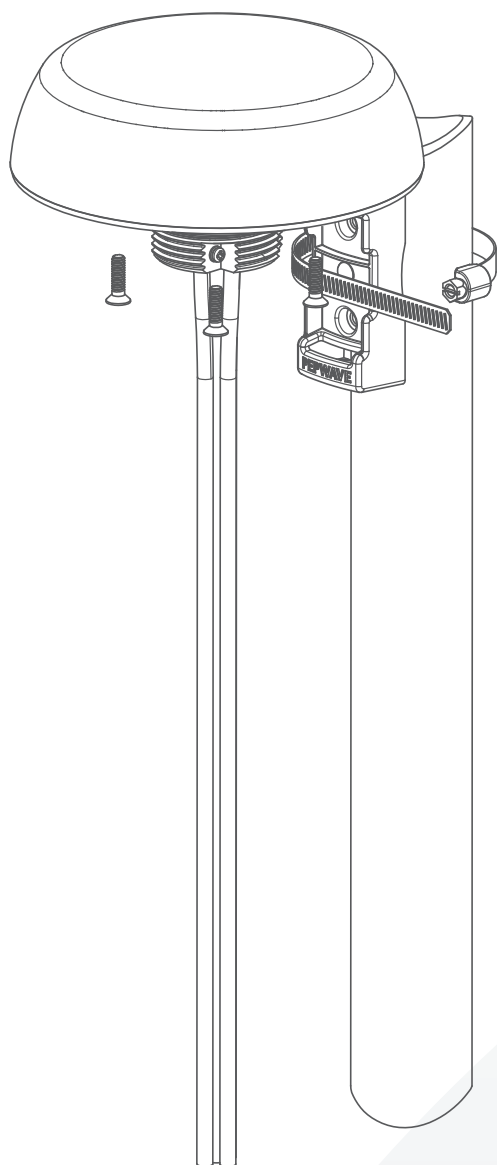
Panel Mount Installation Recommendation



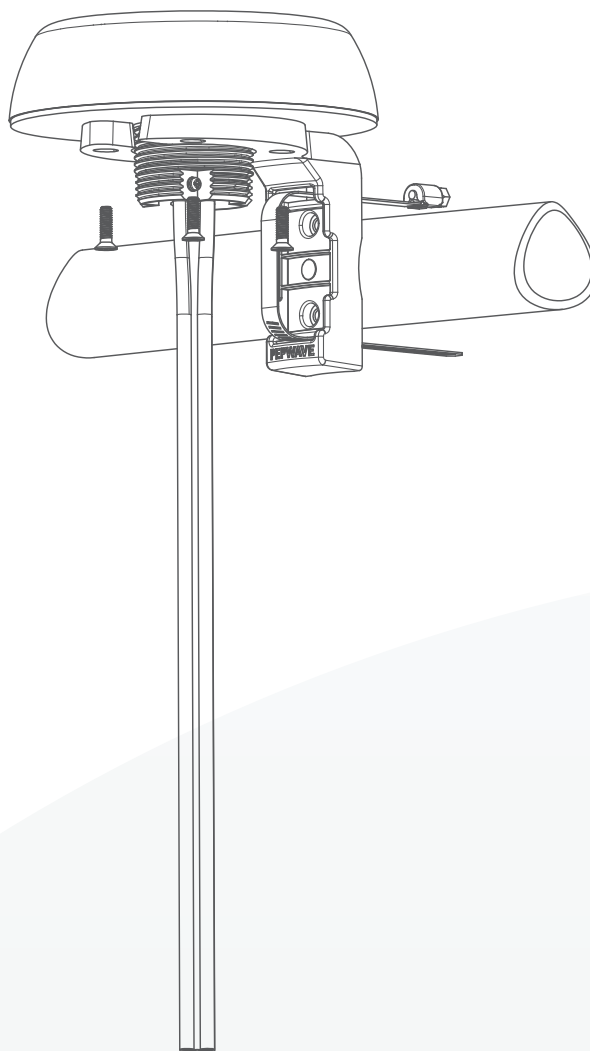
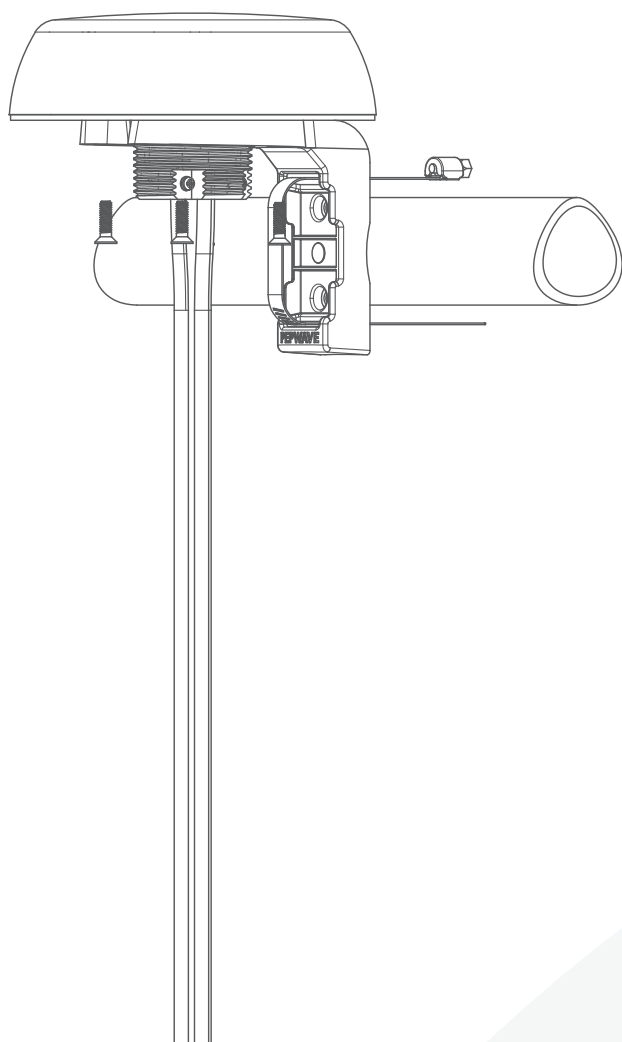
Notes

- Cover panel surface to protect the paint work. When drilling a hole, start with a small one, then increase it.
- Cut out diameter - 1.7 in. / 43 mm Maximum allowed panel thickness - 0.6 in. / 15 mm
- After a drill clean up the surface and apply some paint around the hole to prevent corrosion. Attach the antenna.

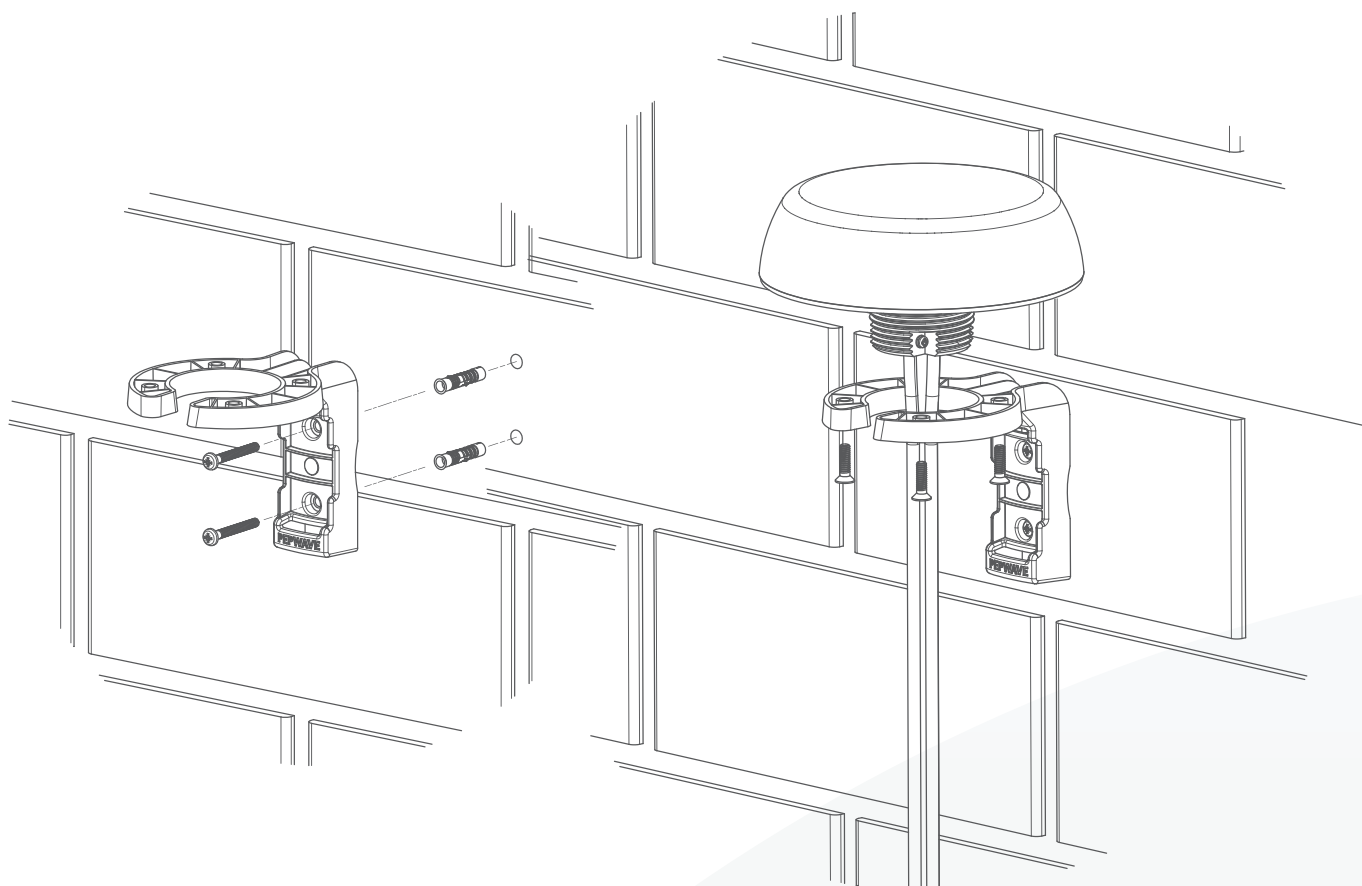
Pole Mount Installation Recommendation



Horizontal Pole Mount Installation Recommendation



Wall Mount Installation Recommendation



Why Rising Connection is using equipment designed and built by Peplink?

- Industry leader in both ISP & Data Bonding across multiple technology platforms
- Reliable hardware from entry level professional equipment through to advanced Enterprises solutions
- Worldwide supported and local support here in Australia by fully trained technicians
- Reliable and secure redundancy paths for mission critical sites
- Designed for maximum possible business uptime

This demonstrates to Rising Connection that you will have the Quality, Reliability and Product Support.