



# MOBILITY 02

2x2 MIMO Wi-Fi Dual Band Antenna

## 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

7  
dBi

IP  
68

Wi-Fi



## Overview

Antenna elements	2x Wi-Fi
Frequency bands	6.2dBi: 2400-2500 MHz 7.3dBi: 4900-6000 MHz
IP rating	IP68
Dimensions	(Height) 1.42" / 36mm (spigot not included) (Diameter) 5.12" / 130mm
Coax cable type	CFD-200
Connector Type	RP-SMA male

## Description

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

## Contact Us

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# Mobility 02



## Specification

### 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° - 176°F / -40° - 80°C
Storage temperature	-40° - 176°F / -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

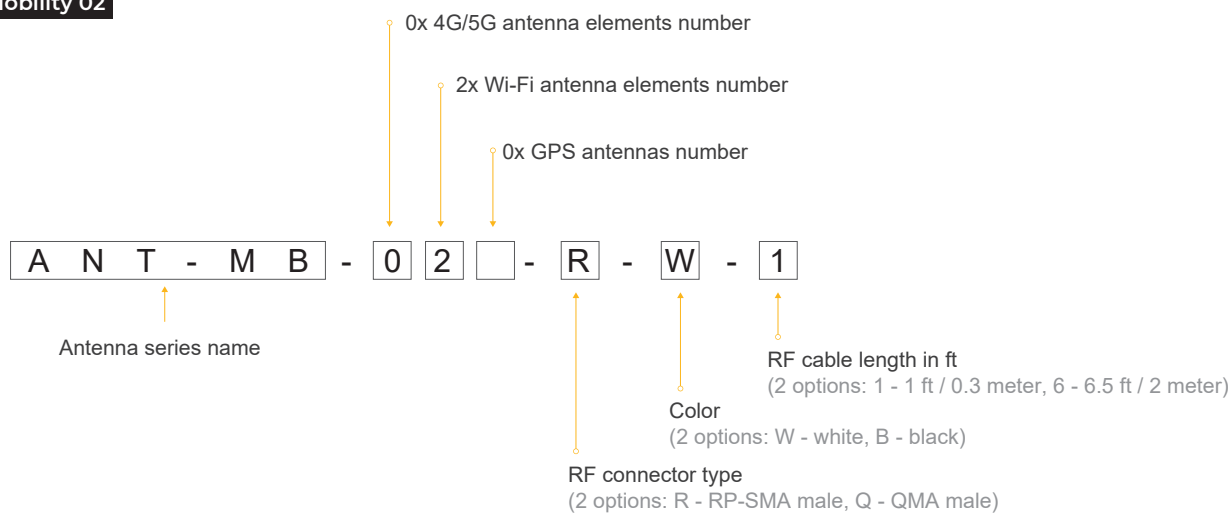
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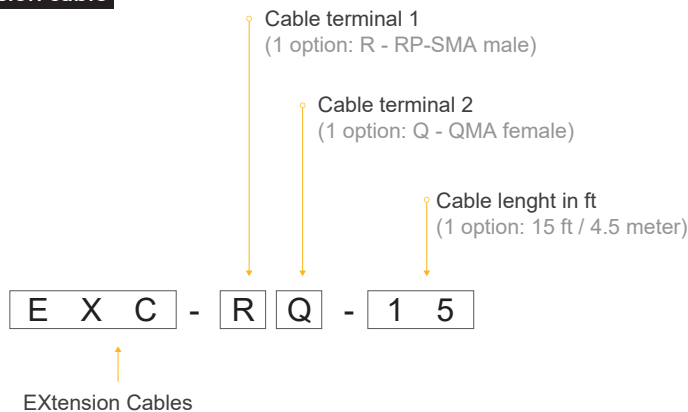
## Ordering information

### Mobility 02

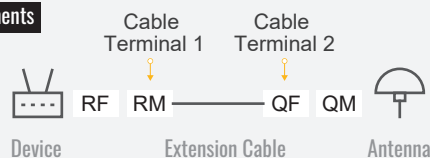


Product Code	Description
ANT-MB-02-R-W-6	2xWi-Fi 2400-6000MHz, IP68, RP-SMA, White, 6.5ft / 2m
ANT-MB-02-R-B-6	2xWi-Fi 2400-6000MHz, IP68, RP-SMA, Black, 6.5ft / 2m
ANT-MB-02-Q-W-1	2xWi-Fi 2400-6000MHz, IP68, QMA, White, 1 ft / 0.3m
ANT-MB-02-Q-B-1	2xWi-Fi 2400-6000MHz, IP68, QMA, Black, 1 ft / 0.3m

### Extension cable

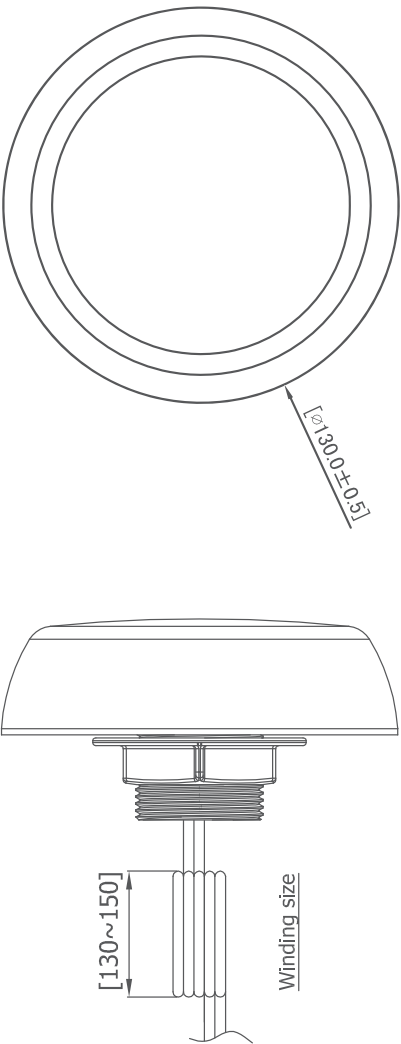


#### Wi-Fi elements

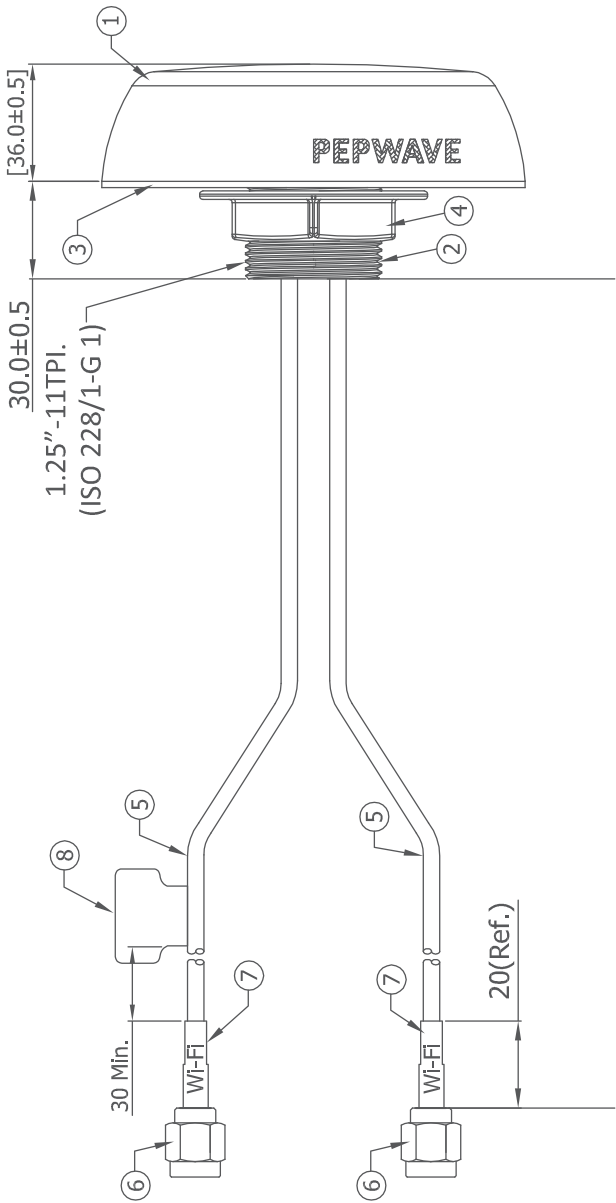


Product Code	Element type	Description
EXC-RQ-15	Wi-Fi elements	Extension coax cable, RP-SMA male to QMA female connector, 15ft / 4.5m

Technical drawing



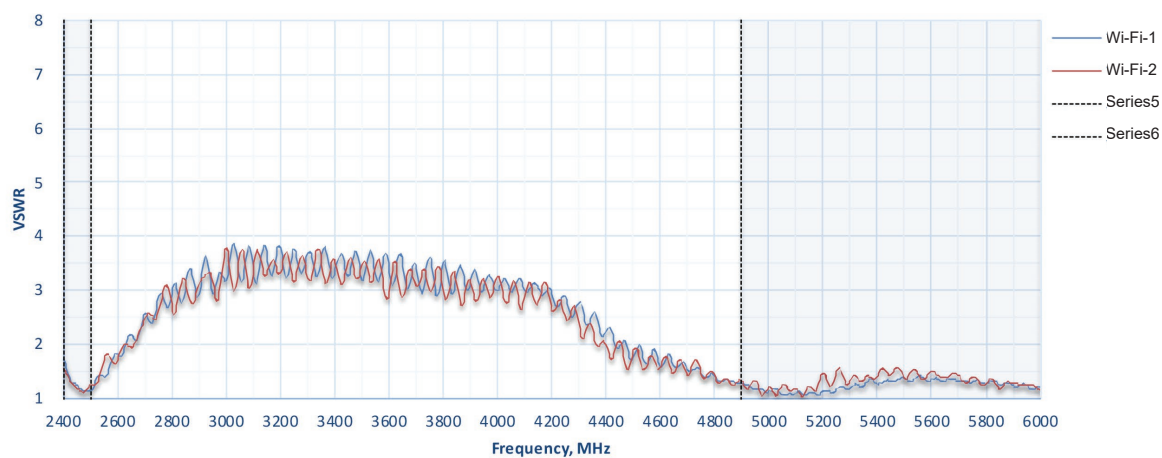
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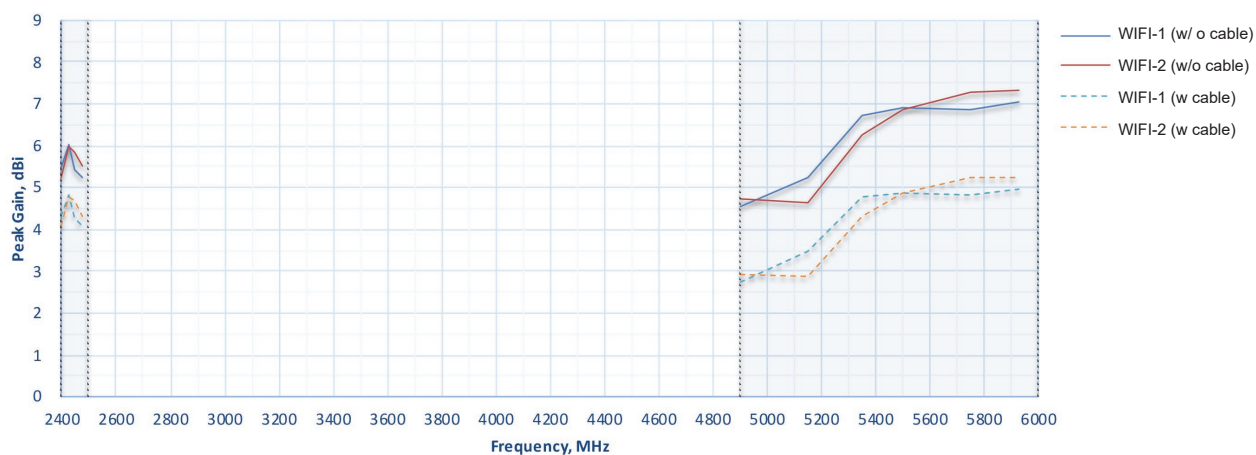
Index

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
5	Cable (CFD-200)	2
6	Connector (RP-SMA male)	2
7	Heat shrinking tube	2
8	Wi-Fi cable marking (blue color)	1

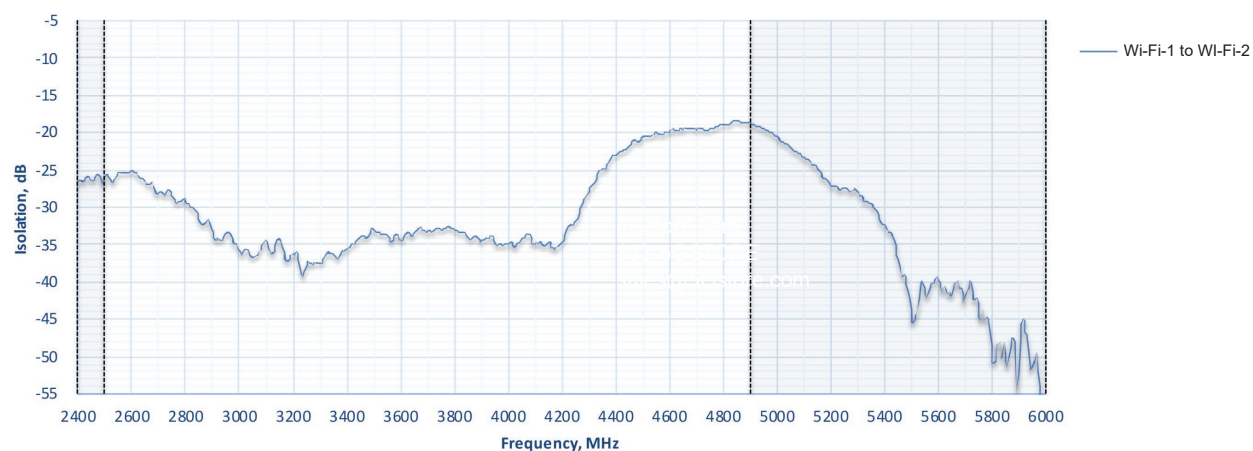
## Wi-Fi Antenna VSWR



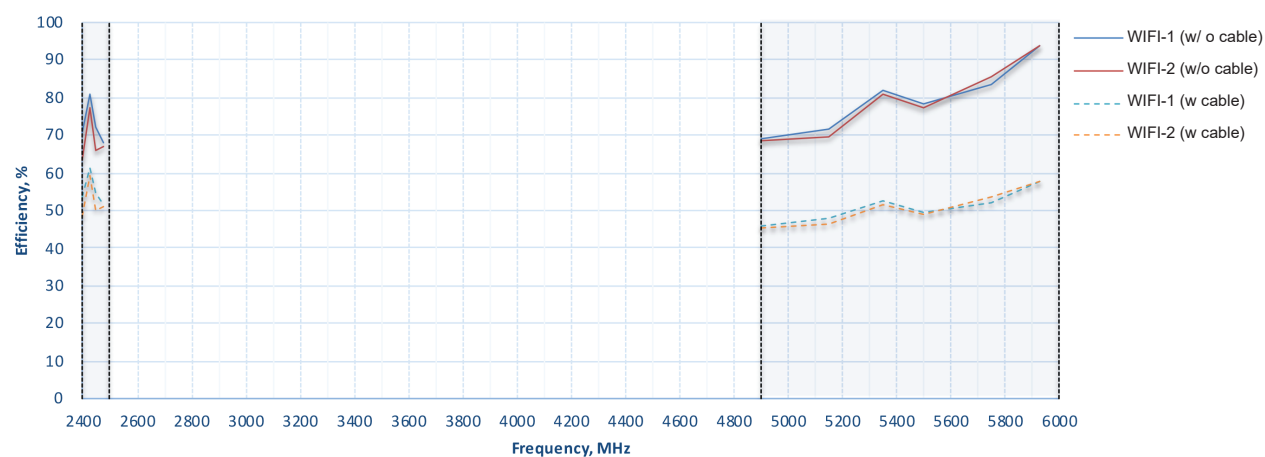
## Wi-Fi Antenna Gain



## Wi-Fi Antenna Isolation



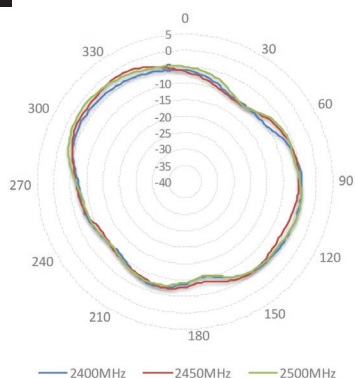
## Wi-Fi Antenna Efficiency



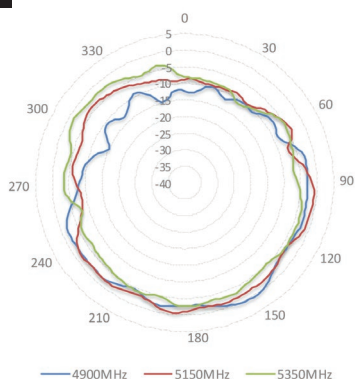


## LTE/5G Antenna Radiation patterns (Azimuth)

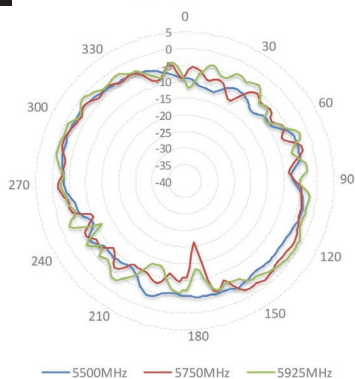
### 2400-2500 MHz



### 4900-5350 MHz



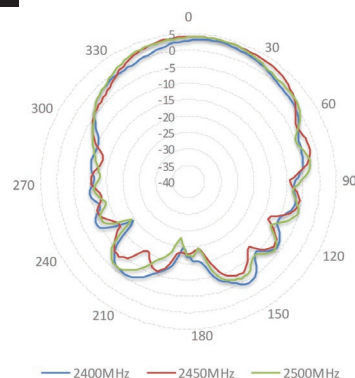
### 5550-5950 MHz



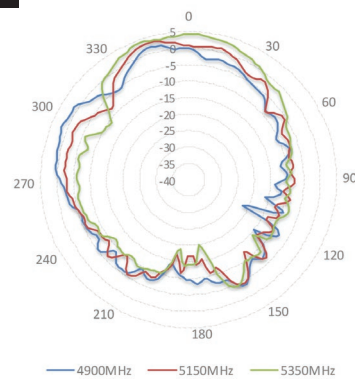
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## LTE/5G Antenna Radiation patterns (Elevation 1)

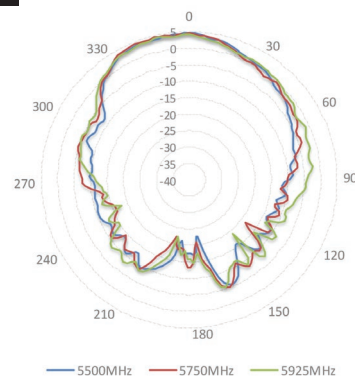
### 2400-2500 MHz



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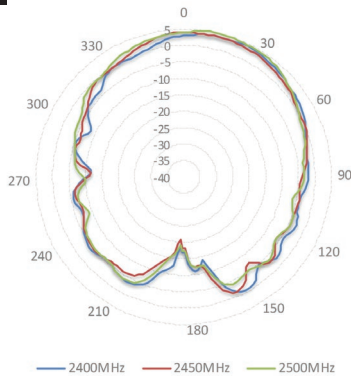
### 5550-5950 MHz



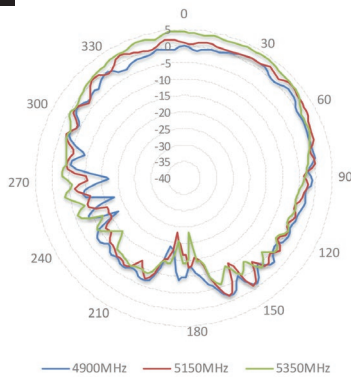


## LTE/5G Antenna Radiation patterns (Elevation 2)

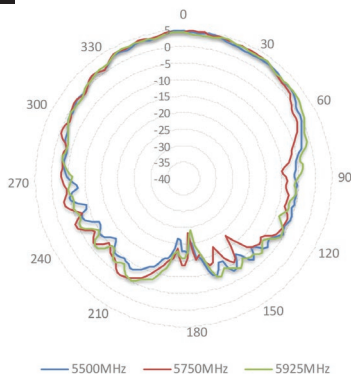
### 2400-2500 MHz



### 4900-5350 MHz



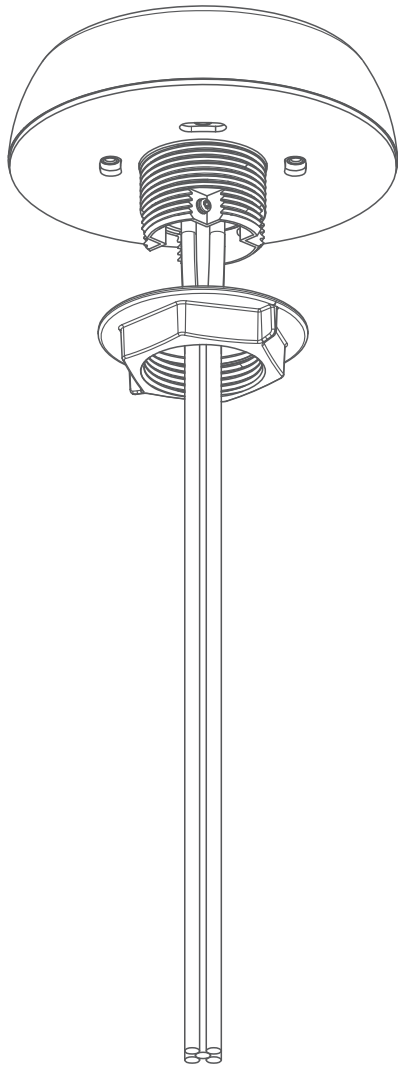
### 5550-5950 MHz



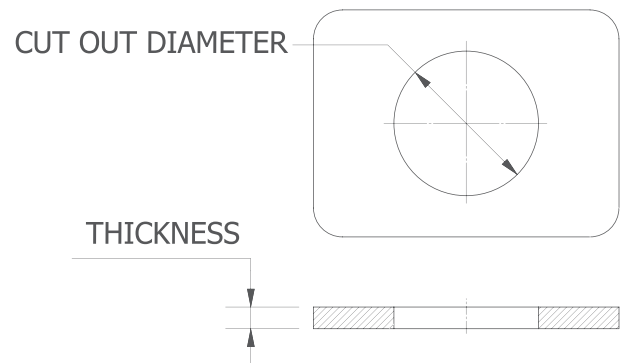
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## Installation recommendation

### Panel Mount



## Mobility 02

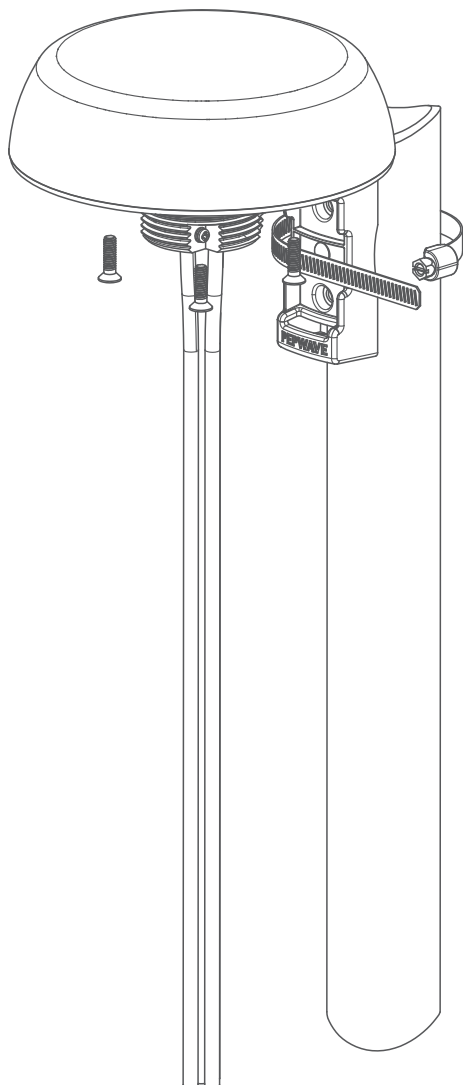


### Notes

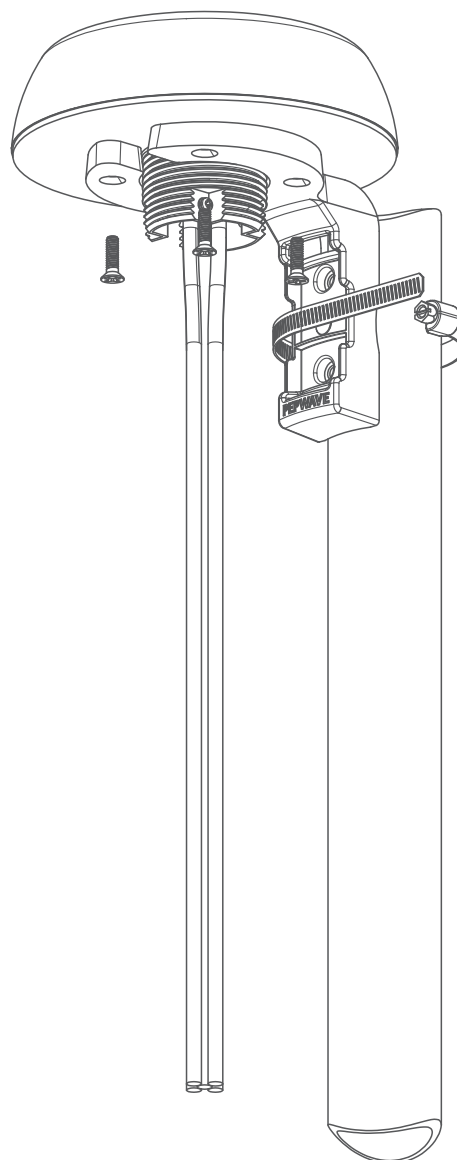
- Cover panel surface to protect the paint work. When drilling a hole, start with a small one, then increase it.
- Cut out diameter - 1.7 in. / 43 mm  
Maximum allowed panel thickness - 0.6 in. / 15 mm
- After a drill clean up the surface and apply some paint around the hole to prevent corrosion. Attach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

## Installation recommendation

### Pole Mount



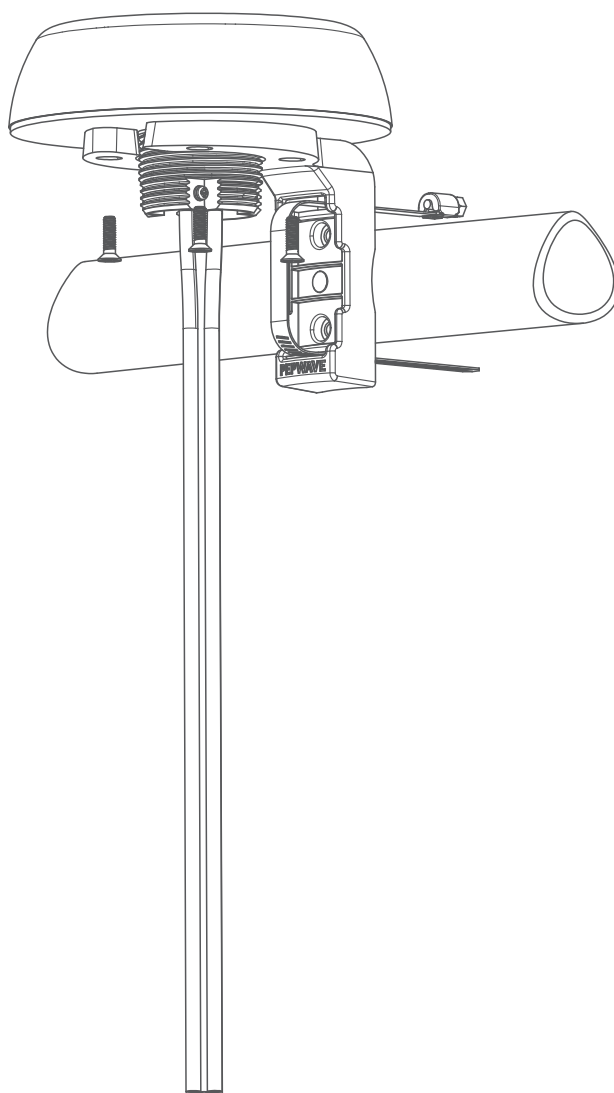
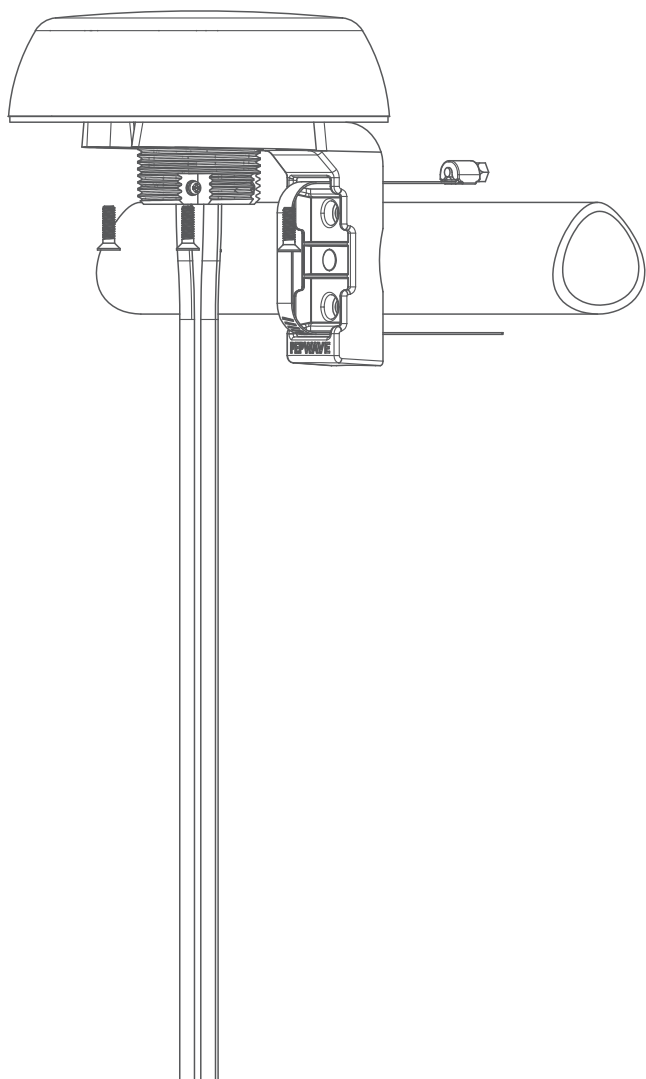
## Mobility 02



## Installation recommendation

### Horizontal Pole Mount

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## Installation recommendation

Wall Mount

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