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

www.peplink.com

©Peplink. All rights reserved.

peplink | PEPWAVE

Mobility 02

Overview

Antenna elements		2x Wi-Fi
Frequency bands		6.2dBi: 2400-2500 MHz 7.3dBi: 4900-6000 MHz
IP rating		IP68
Dimensions	(Height) (Diameter)	1.42" / 36mm (spigot not included) 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

sales@peplink.com

Find a Peplink Certified Partner

https://www.peplink.com/peplink-certified-partners/

©Peplink. All rights reserved.

peplink | PEPWAVE

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) (Diameter)	1.42 in. / 36mm (spigot not included) 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

©Peplink. All rights reserved.

Ordering information

Mobility 02

0x 4G/5G antenna elements number

2x Wi-Fi antenna elements number

0x GPS antennas number

A N T - M B - 0 2 [ ] - R - W - 6

Antenna series name

RF connector type
(1 option: R - RP-SMA male)

Color
(2 options: W - white, B - black)

RF cable length in ft
(2 options: 1 - 1 ft / 0.3 meter, 6 - 6.5 ft / 2 meter)

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

Extension cable

Cable terminal 1
(1 option: R - RP-SMA male)

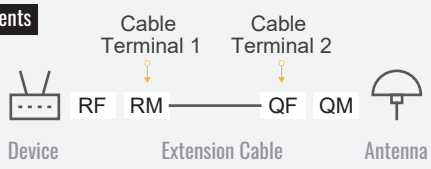
Cable terminal 2
(1 option: Q - QMA female)

Cable lenght in ft
(1 option: 15 ft / 4.5 meter)

E X C - R Q - 1 5

EXtension Cables

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

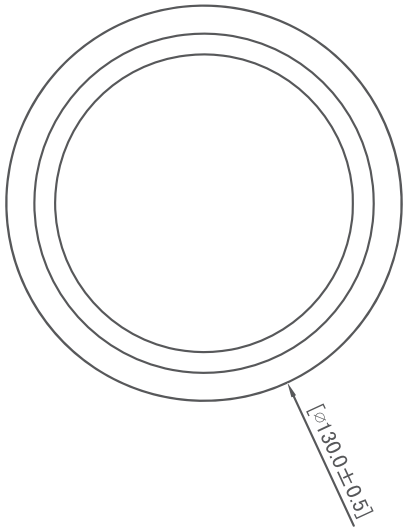
Mobility 02

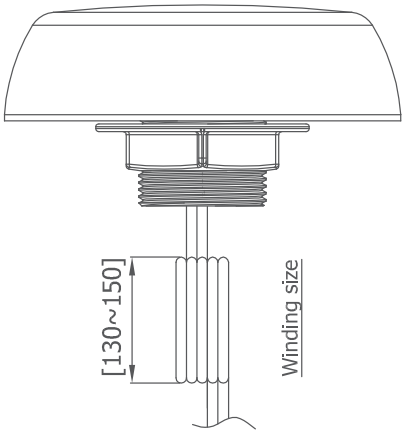
©Peplink. All rights reserved.

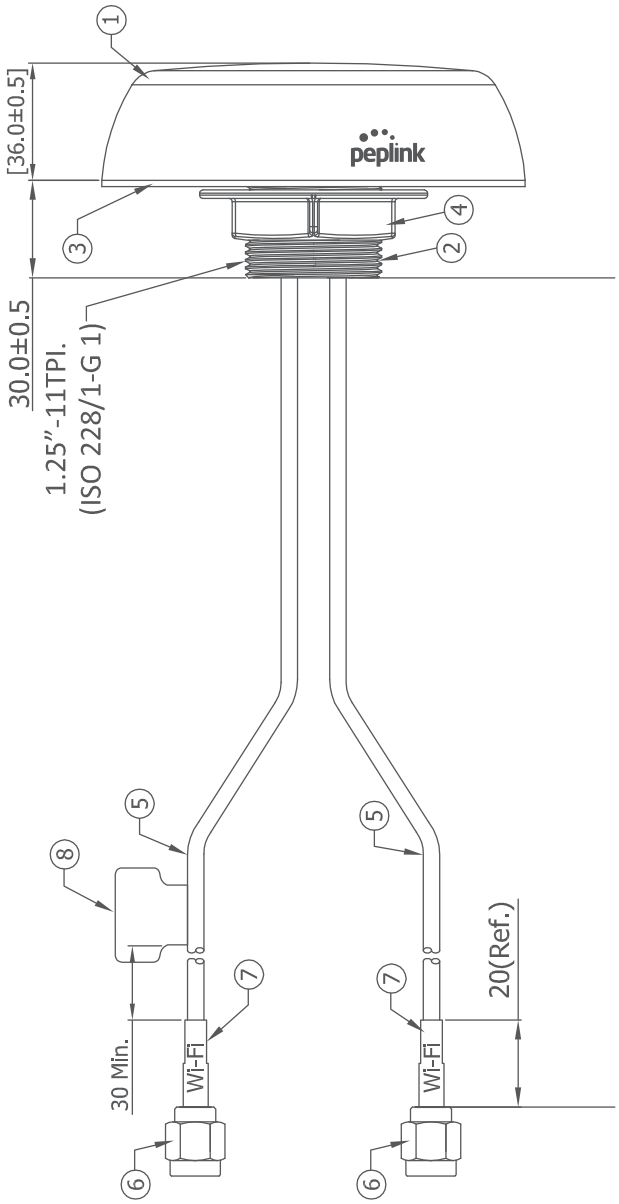
peplink | PEPWAVE

Mobility 02

Technical drawing





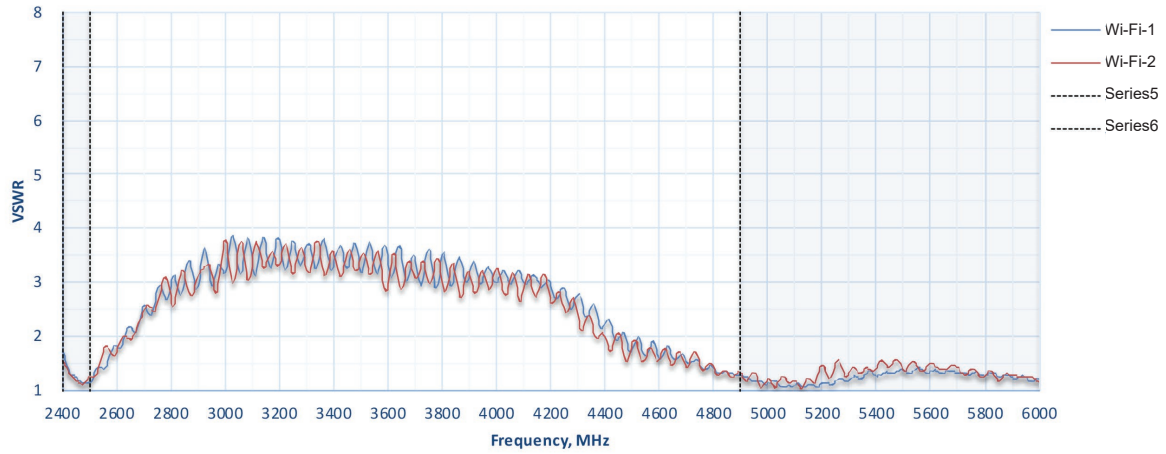


Index

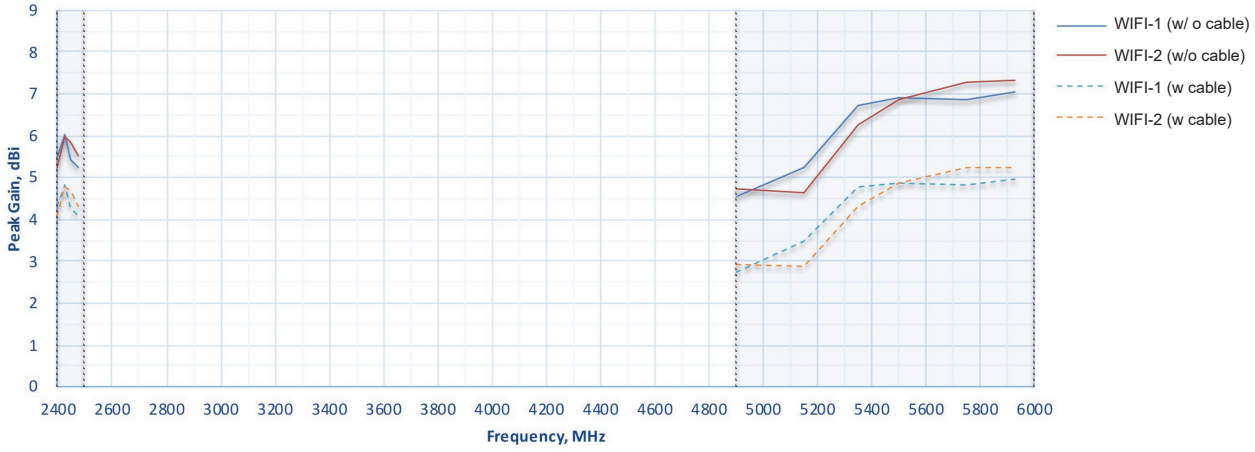
No.	Description	Qty
1	Antenna top cover (PC+ABS)	1
2	Antenna bottom cover (PC+ABS)	1
3	Double sided 3M adhesive pad	1
4	Hexagon NUT (PC+ABS)	1
5	Cable (CFD-200)	2
6	Connector (RP-SMA male)	2
7	Heat shrinking tube	2
8	Wi-Fi cable marking (blue color)	1

©Peplink. All rights reserved.

Wi-Fi Antenna VSWR

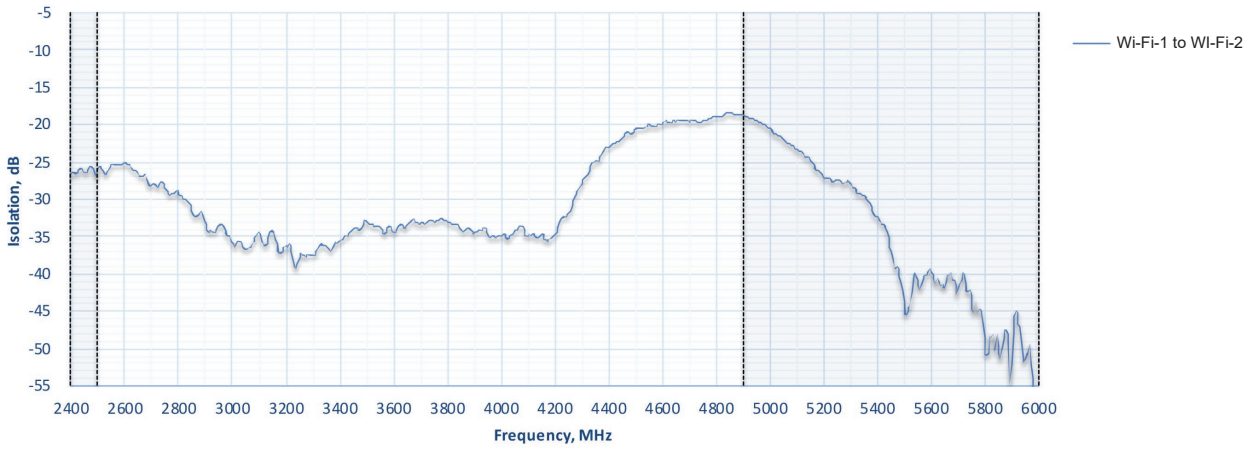


Wi-Fi Antenna Gain

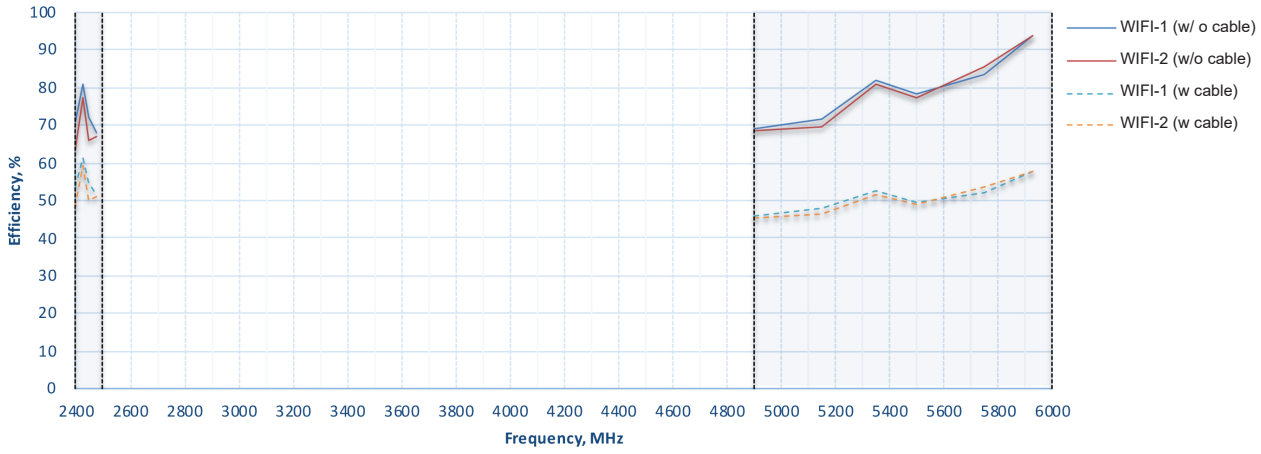


©Peplink. All rights reserved.

Wi-Fi Antenna Isolation



Wi-Fi Antenna Efficiency



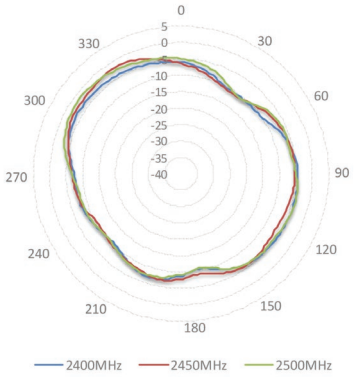
©Peplink. All rights reserved.

peplink | PEPWAVE

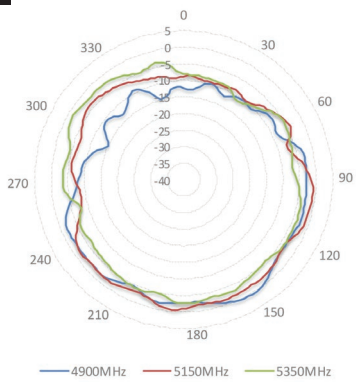
Mobility 02

Wi-Fi Radiation Patterns (Azimuth)

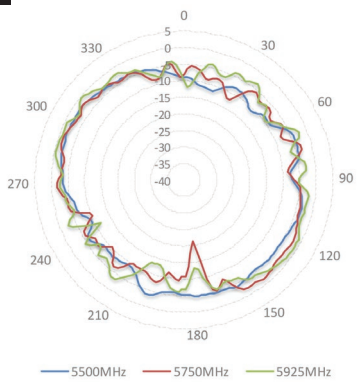
2400-2500 MHz



4900-5350 MHz

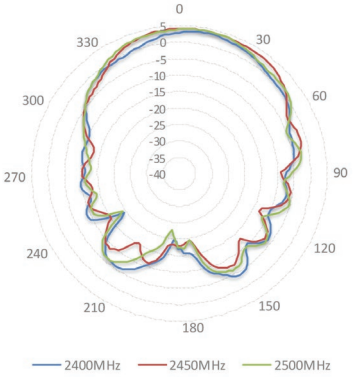


5550-5950 MHz

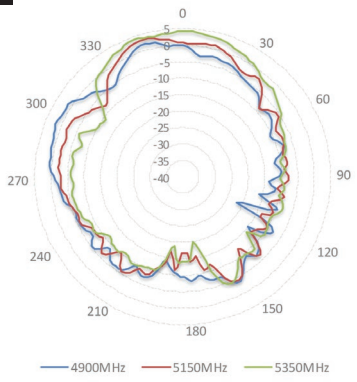


Wi-Fi Radiation Patterns (Elevation 1)

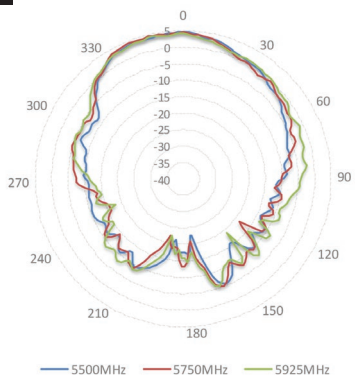
2400-2500 MHz



4900-5350 MHz



5550-5950 MHz

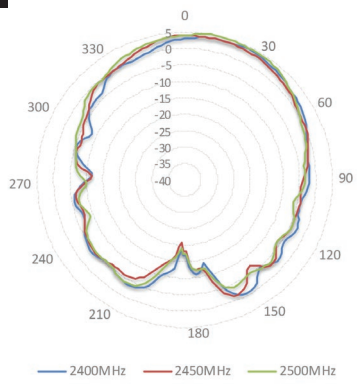


©Peplink. All rights reserved.

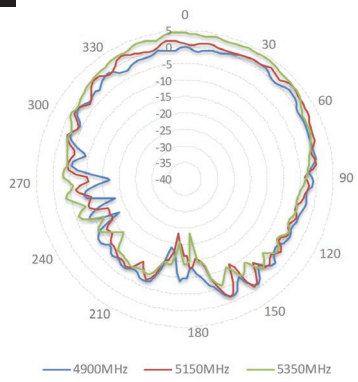
Wi-Fi Radiation Patterns (Elevation 2)

Mobility 02

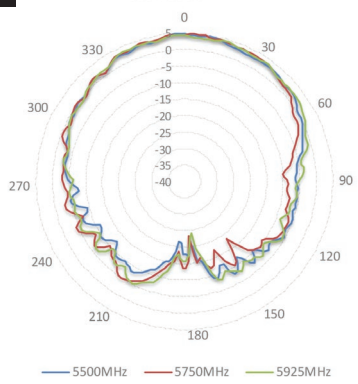
2400-2500 MHz



4900-5350 MHz



5550-5950 MHz

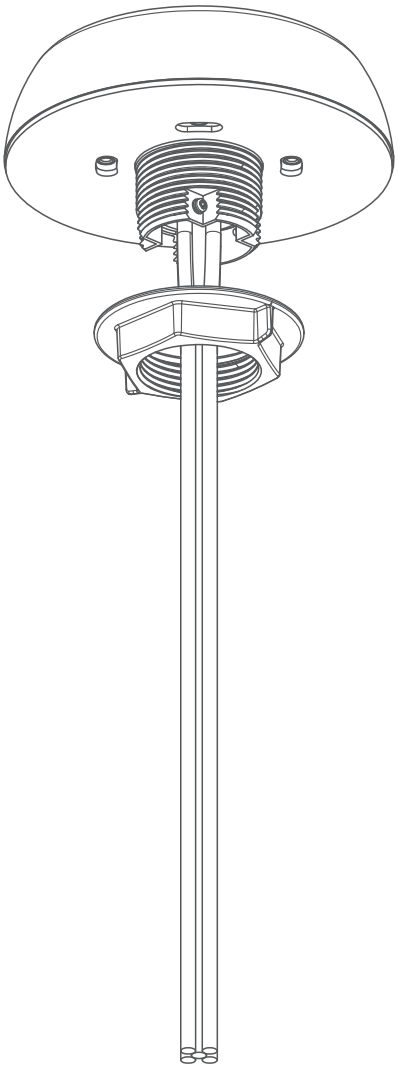


©Peplink. All rights reserved.

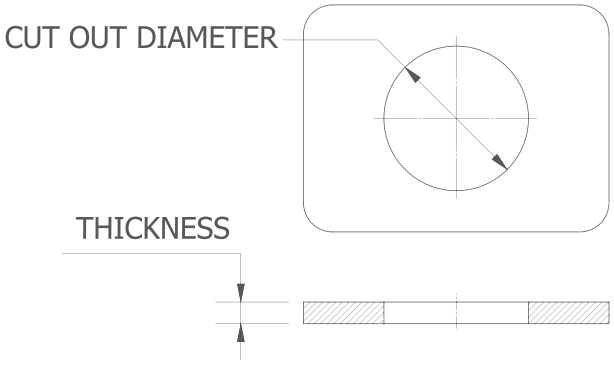
peplink | PEPWAVE

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.

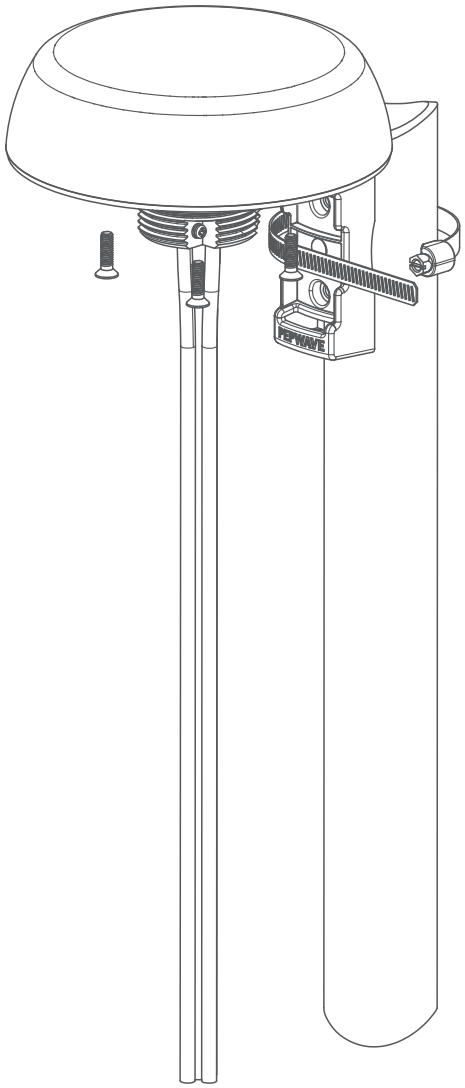
©Peplink. All rights reserved.

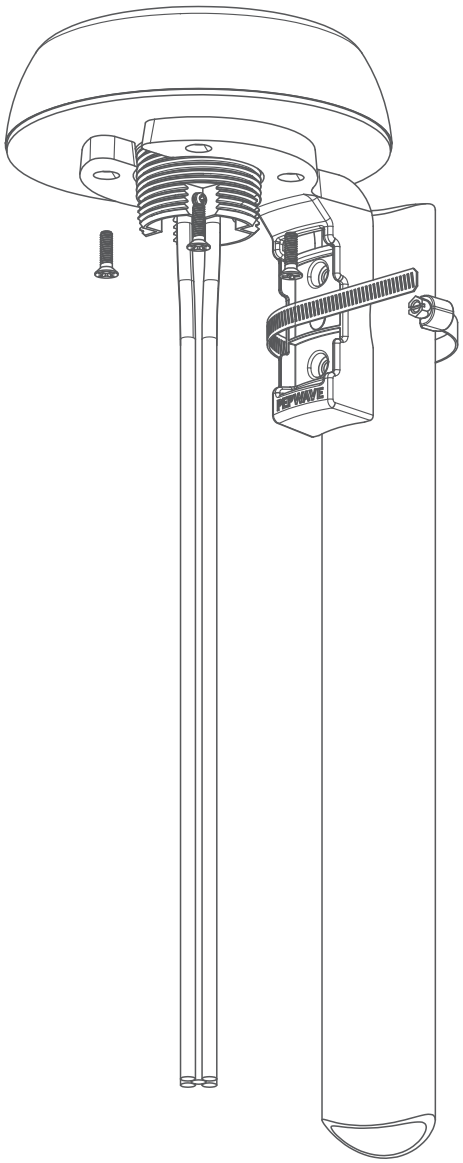
peplink | PEPWAVE

Installation recommendation

Pole Mount

Mobility 02





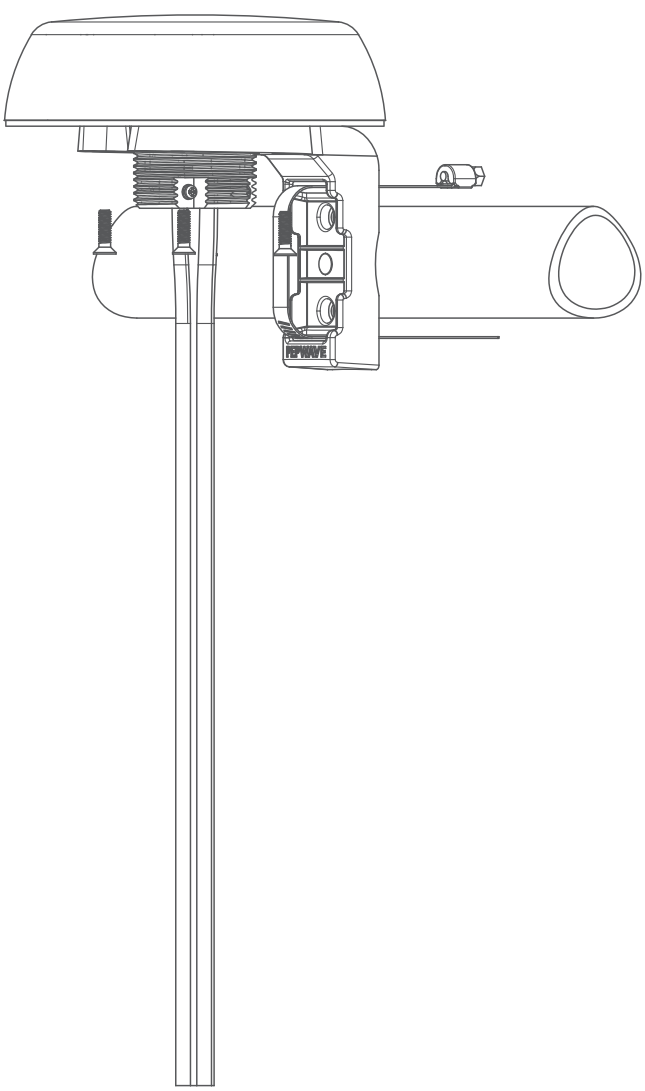
©Peplink. All rights reserved.

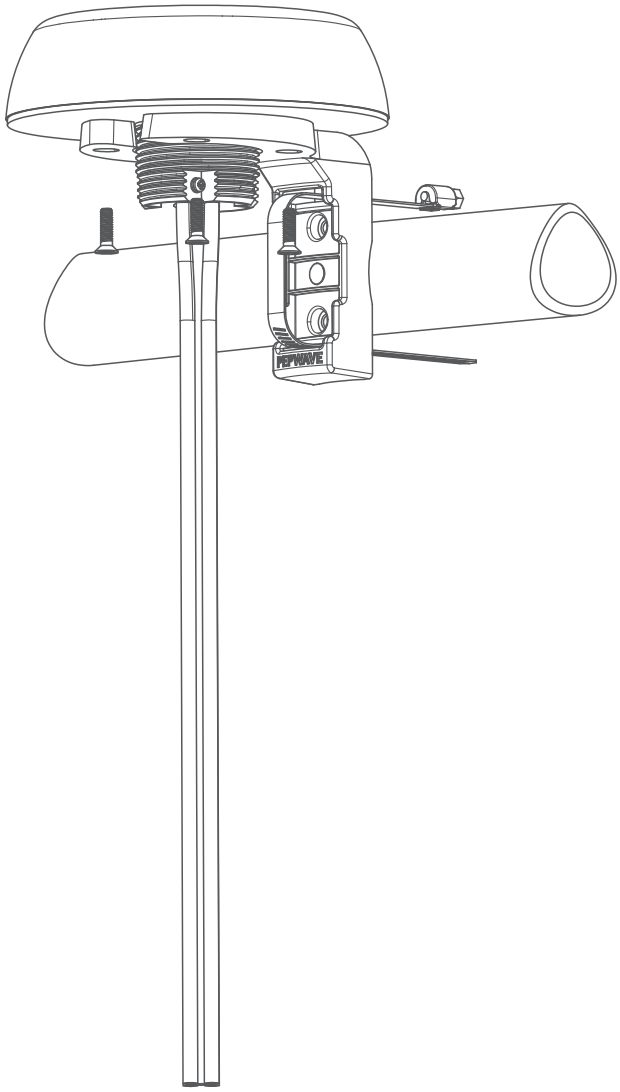
peplink | PEPWAVE

Installation recommendation

Horizontal Pole Mount

Mobility 02





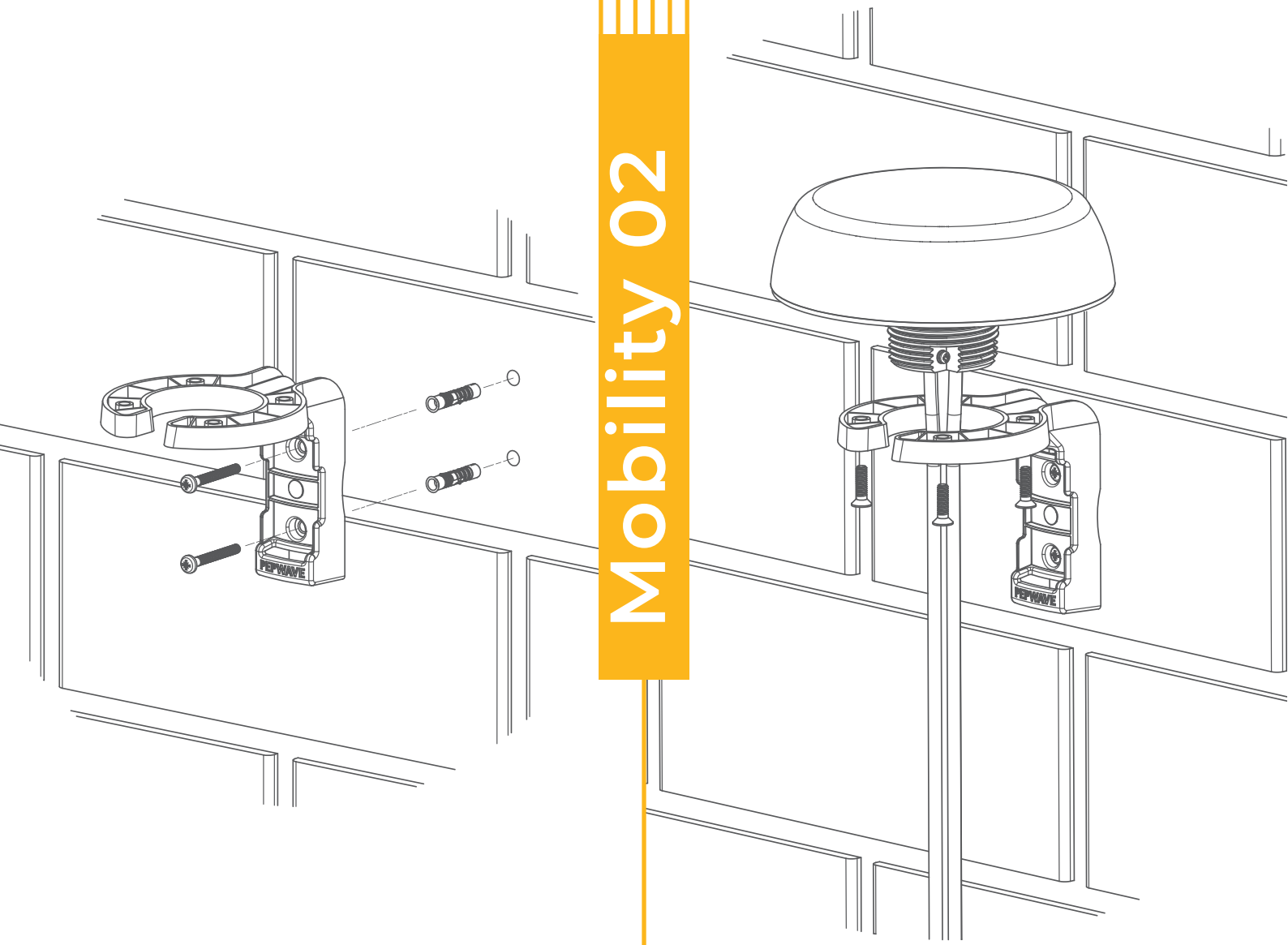
©Peplink. All rights reserved.

peplink | PEPWAVE

Installation recommendation

Wall Mount

Mobility 02



www.peplink.com

©Peplink. All rights reserved.

peplink | PEPWAVE