ANTENNA MAX

Maximum Flexibility, Maximum Gain
Outdoor Cellular / GPS Antenna + Enclosure
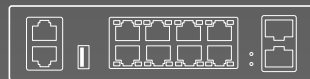
Antenna MAX

Maximum Gain: Up to 6.6dBi

Worried about cable loss?

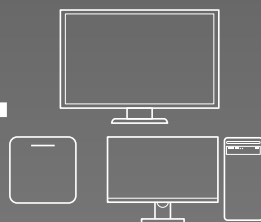Minimize cable loss by installing your router directly into the antenna enclosure.
Retain maximum signal gain by connecting the Antenna Max to the rest of your network with an ethernet cable.

Conventional Antenna

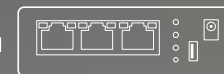## Achieve Near 0dB cable loss

by eliminating RF cables from your setup.

Switch

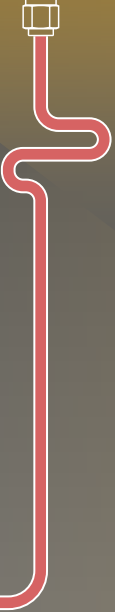## 5m RF cable 5dB+ cable loss

A 5m RF cable could lead to nearly complete signal loss on higher frequencies (2100MHz+)

Client devices

Router

Maximum Durability

UV-resistant plastic enclosure resists moisture, water intrusion, salt spray and corrosion.
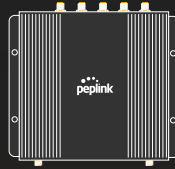
Antenna MAX

Maximum Flexibility

Mix-and-match the antenna with many routers including:

| BR1 Mini Series [1] | Transit Duo Pro [2] | BR1 Pro 5G [2] / CAT20 [2] | POTS Adapter [2] |

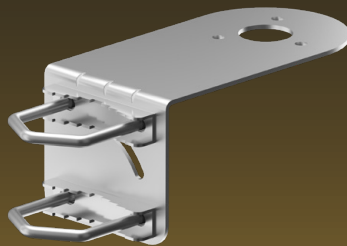[1] BR1 Mini series: BR1 Mini, BR1 Mini Core, BR1 Mini 5G, BR1 Mini M2M. [2] For certain products which do not support PoE In, a PoE Splitter is required.

Fixed-roof L-mount set included

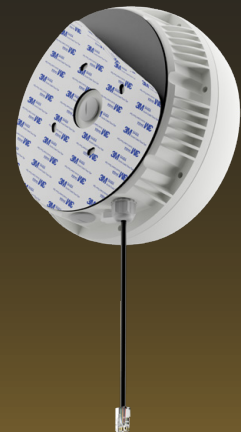Mounts easily on mobile equipment and vehicles - trucks, vans, boats.
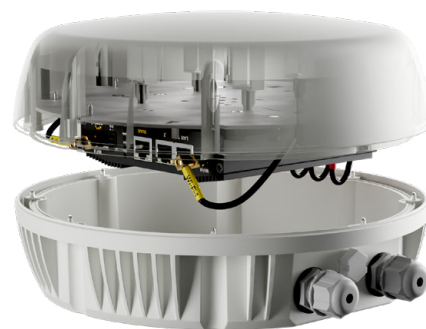
| Deck Mount | Pole Mount | Wall - Mount | Surface Mount |

Maximum Value

Antenna Max is a **cost-effective way** to get maximum performance from your cellular and 5G routers in outdoor environments.

Antenna MAX

peplink

Specification

Cellular

Antenna Elements	4 elements
Peak Gain & Frequencies	3.0dBi: 617-960MHz 6.2dBi: 1410-2700MHz 5.7dBi: 3400-4400MHz 6.6dBi: 5000-6000MHz
VSWR	< 2.5 over 95% of the band
Feed Power Handling	10W
Input Impedance	50 Ω
Polarisation	Linear
Connectors	Right angle SMA male

Wi-Fi

Antenna Elements	2 elements
Peak Gain & Frequencies	5.4dBi: 2400-2500MHz 7.4dBi: 5000-6000MHz
VSWR	< 2.5
Feed Power Handling	10W
Input Impedance	50 Ω
Polarisation	Linear
Connectors	Right angle RP-SMA male

GPS

Frequency Range	1575-1602 MHz
Peak Gain	0.9dBi@1575MHz 0.8dBi@1602MHz
VSWR	< 2.0
Gain: LNA	27 ±3dB
Noise Figure	2.5dB
Operating Voltage	3.3V
Power Consumption	10 ±3.0mA
Connectors	Right angle SMA male

Specifications are subject to change without notice.

Antenna MAX

Specification

Mounting

Supported Types	Surface, wall, pole, deck

Package Contents

Package Contents	Antenna MAX L-Mount Set Double sided 3M adhesive pad 3pcs Cable Gland 2pcs Hole Plug

Mechanical

Product Dimensions	4.72" / 120 mm - Height 9.84" / 250 mm - Diameter
Packaged Dimensions	13.82" x 11.61" x 5.75" 351x295x146mm
Enclosure Material	UV stable PC

Environmental, Compliance

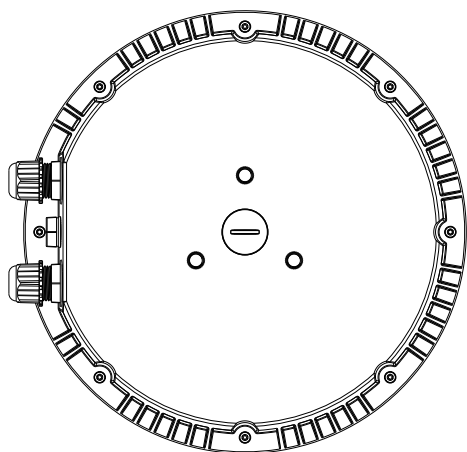|			
IP Rating	IP67	**Compliance**	ROHS, REACH, WEEE
Operating Temperature	-40° - 176°F / -40° - 80°C	**Enclosure Flammability**	UL 94 V-0 (1.47 mm)
		UV resistance	UL 746C (F1 long-term UV exposure)
Storage Temperature	-40° - 176°F / -40° - 80°C	**Salt Spray**	MIL-STD 810F/ASTM 8117

Ordering Information

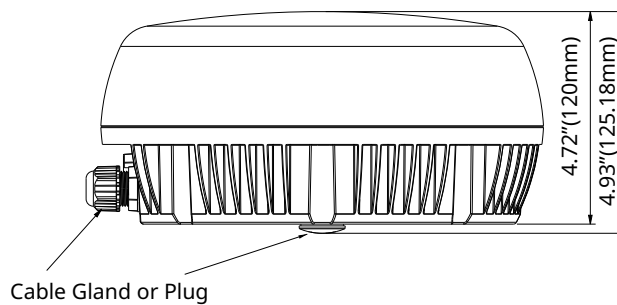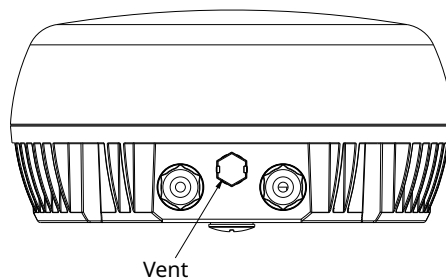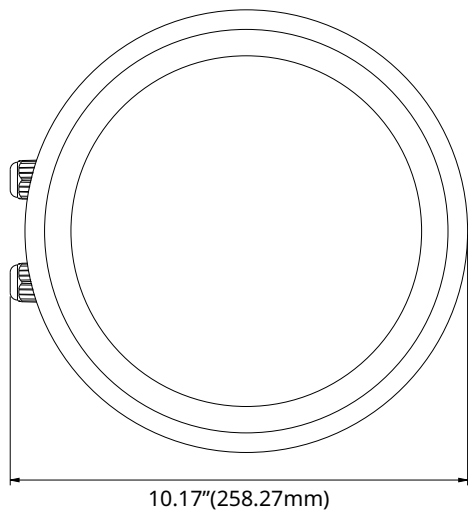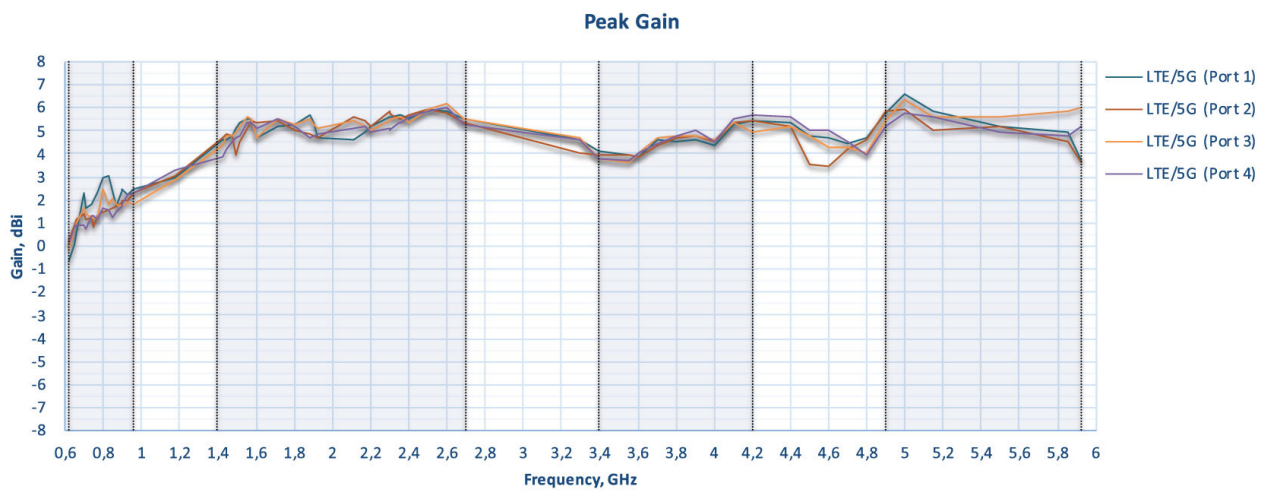| Product Code	Description
ANT-MAX	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP67, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White

Antenna MAX

Technical Drawing

10.17"(258.27mm)

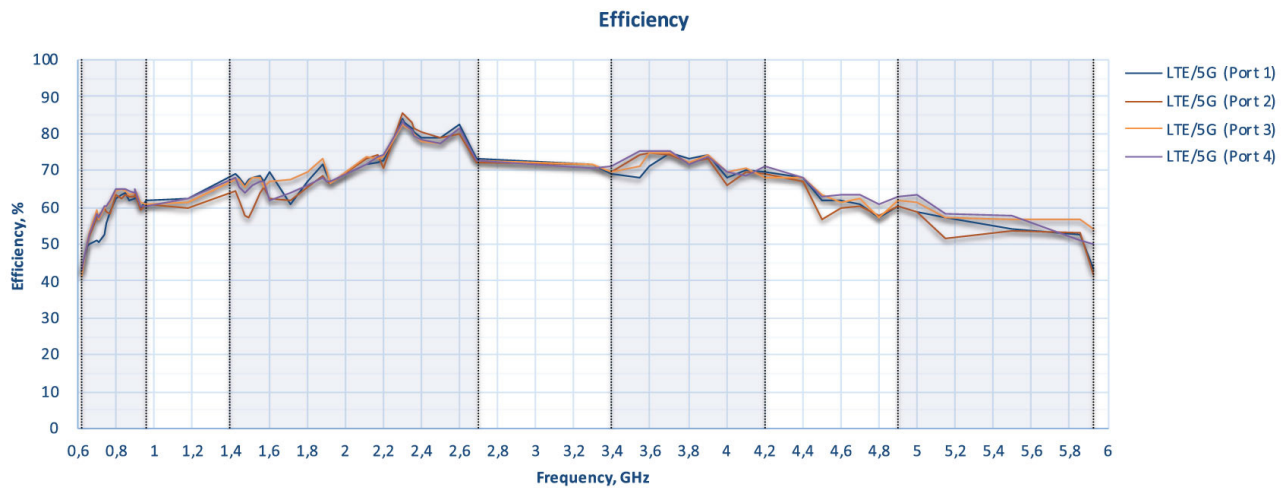Vent

4.72"(120mm)
4.93"(125.18mm)

Cable Gland or Plug

9.84"(249.94mm)

Antenna MAX
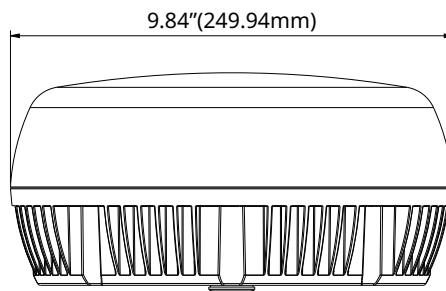
Cellular Antenna Performance

LTE/5G VSWR

Legend:
- LTE/5G (Port 1)
- LTE/5G (Port 2)
- LTE/5G (Port 3)
- LTE/5G (Port 4)

Y-axis: VSWR
X-axis: Frequency, GHz

Peak Gain

Legend:
- LTE/5G (Port 1)
- LTE/5G (Port 2)
- LTE/5G (Port 3)
- LTE/5G (Port 4)

Y-axis: Gain, dBi
X-axis: Frequency, GHz

Efficiency

Legend:
- LTE/5G (Port 1)
- LTE/5G (Port 2)
- LTE/5G (Port 3)
- LTE/5G (Port 4)

Y-axis: Efficiency, %
X-axis: Frequency, GHz

Antenna MAX
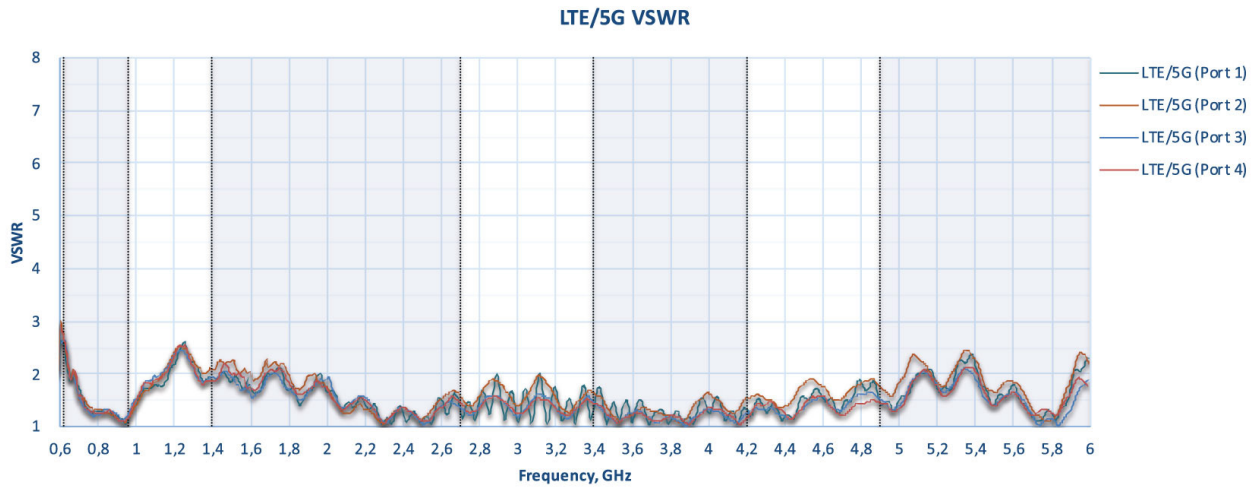
Wi-Fi Antenna Performance

Wi-Fi Antenna VSWR

Wi-Fi VSWR

Legend:
— Wi-Fi (Port 1)
— Wi-Fi (Port 2)

Wi-Fi Antenna Gain

Peak Gain

Legend:
— Wi-Fi (Port 1)
— Wi-Fi (Port 2)
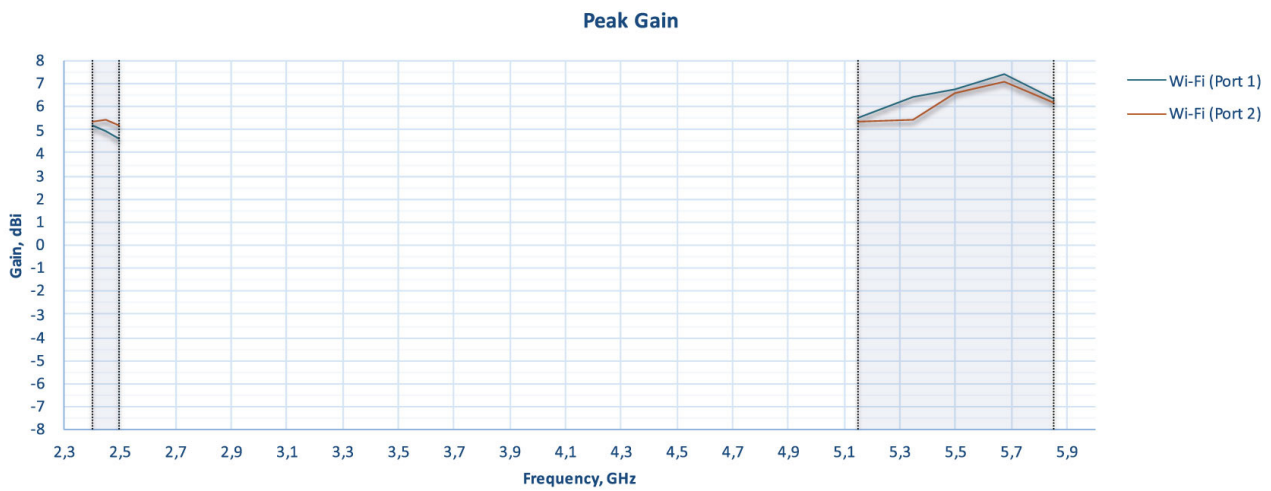
Wi-Fi Antenna Efficiency

Efficiency

Legend:
— Wi-Fi (Port 1)
— Wi-Fi (Port 2)

Antenna MAX
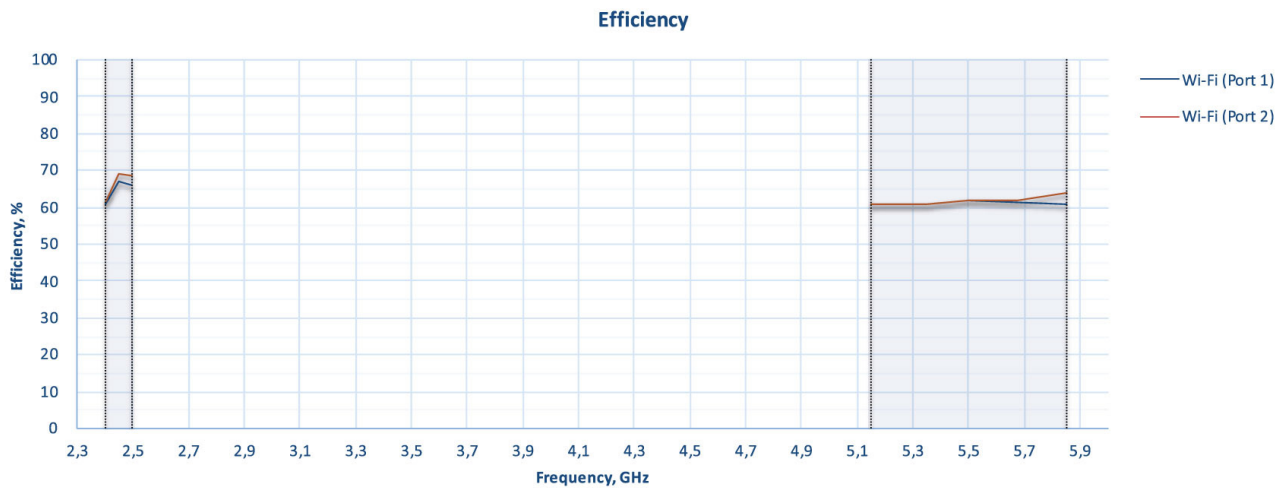
Cellular & Wi-Fi Antenna Performance
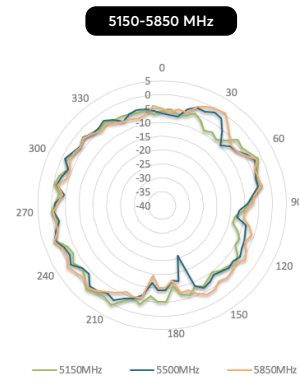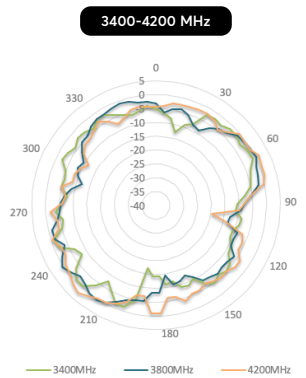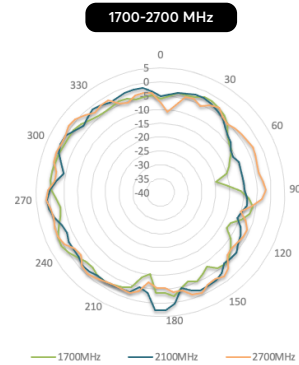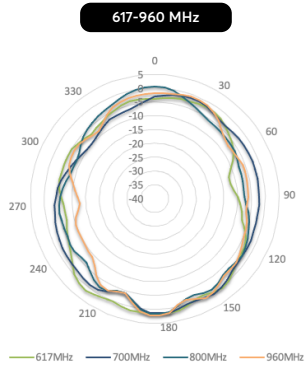
LTE/5G and Wi-Fi antenna elements isolation

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Radiation Pattern

617-960 MHz

617MHz — 700MHz — 800MHz — 960MHz

1700-2700 MHz

1700MHz — 2100MHz — 2700MHz

3400-4200 MHz

3400MHz — 3800MHz — 4200MHz

5150-5850 MHz

5150MHz — 5500MHz — 5850MHz

617-960 MHz

617MHz — 700MHz — 800MHz — 960MHz

1700-2700 MHz

1700MHz — 2100MHz — 2700MHz

3400-4200 MHz

3400MHz — 3800MHz — 4200MHz

5150-5850 MHz

5150MHz — 5500MHz — 5850MHz

Antenna MAX

Radiation Pattern

2400-2500 MHz

— 2400MHz — 2500MHz

5150-5850 MHz

— 5150MHz — 5500MHz — 5850MHz

Wi-Fi Radiation Patterns (Elevation 1)

2400-2500 MHz

— 2400MHz — 2500MHz

5150-5850 MHz

— 5150MHz — 5500MHz — 5850MHz

Wi-Fi Radiation Patterns (Elevation 2)

2400-2500 MHz

— 2400MHz — 2500MHz

5150-5850 MHz

— 5150MHz — 5500MHz — 5850MHz
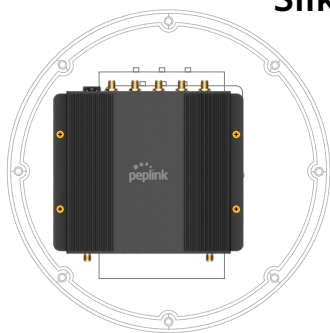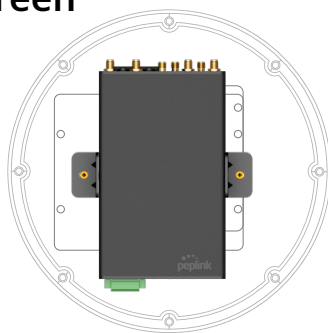
Antenna MAX
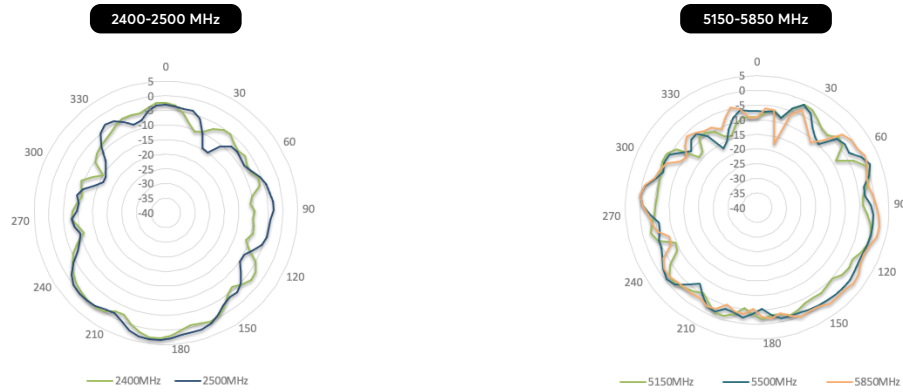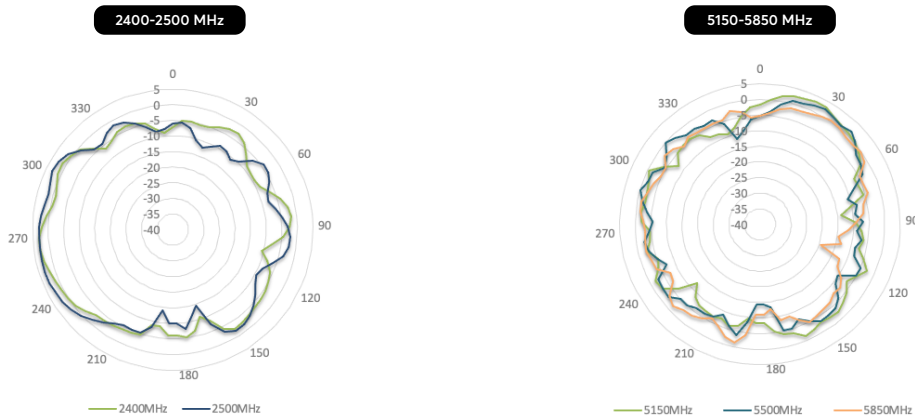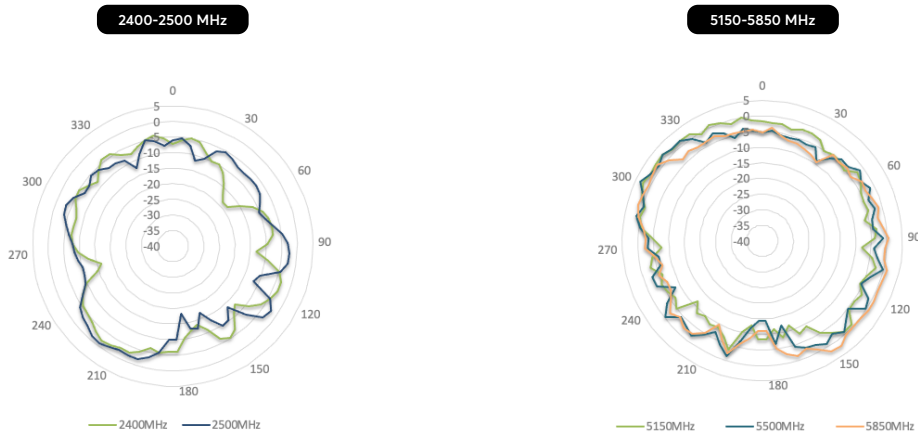
Installation Recommendation
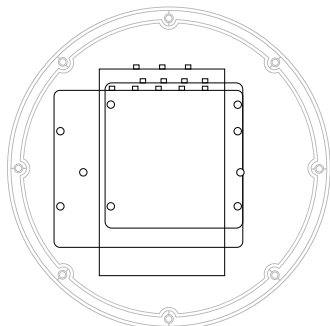
Silkscreen

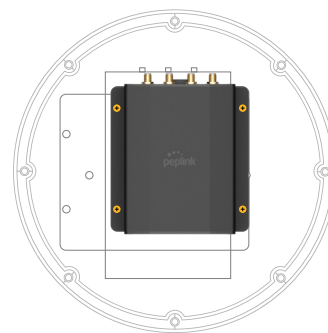Make sure you align the router with the placement mark on the silkscreen.

BR1 Pro 5G

Transit Duo Pro

BR1 Mini Series

Tighten the screws securely into the corresponding router's mounting holes.

Antenna MAX

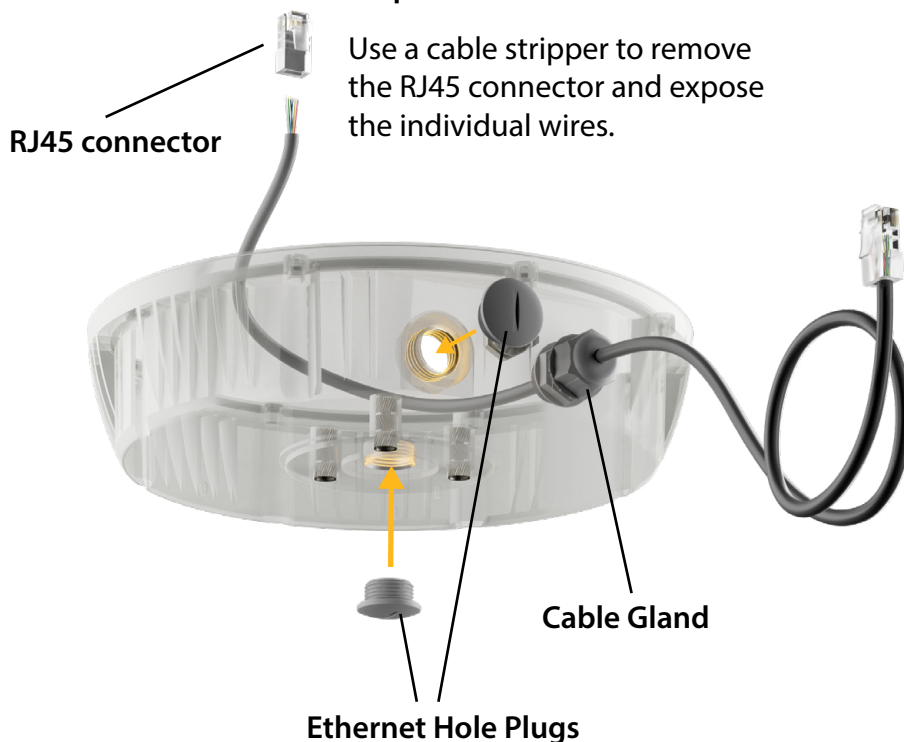## Installation Recommendation

Connect Cables to Router

Align the **Wi-Fi**, **LTE** and **GPS** SMA cables with the corresponding ports on the router. Tighten the connector into the port securely in place.

Ethernet Cable

Step 1

RJ45 connector

Use a cable stripper to remove the RJ45 connector and expose the individual wires.

Step 2

Ethernet cable can be connected via the bottom or side cable gland on the device.

For any unused hole, use a **ethernet hole plug** to securely seal it.

Cable Gland

Ethernet Hole Plugs

Note: Be sure not to use excessive force when removing the connector as it is delicate.

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Installation Recommendation
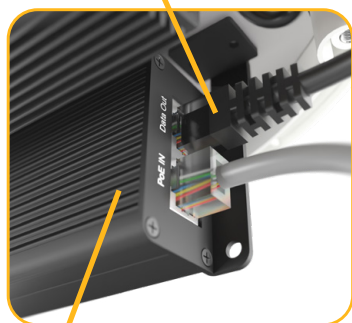
Attach Bottom Cover
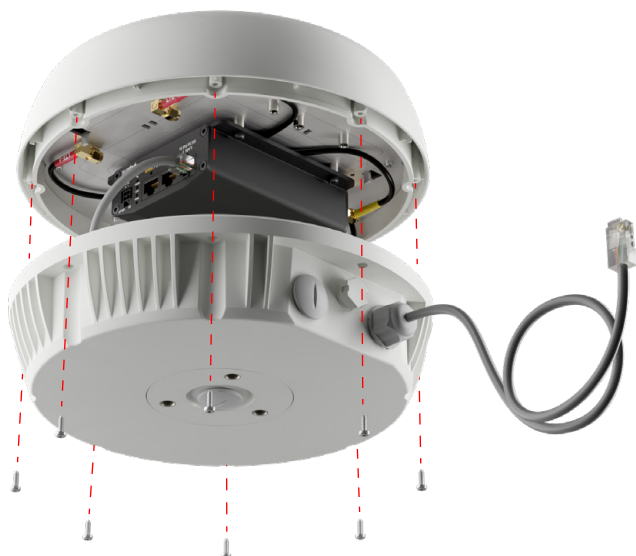
Align the bottom cover with the top cover , secure it in place, and then tighten the screws.
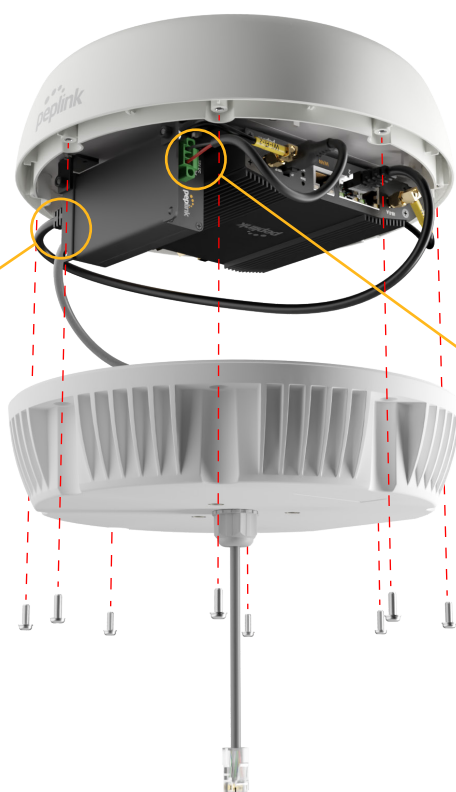
Install PoE Splitter

While some routers may not support Power over Ethernet (PoE) input, **Peplink PoE splitter** can be used to provide power to these devices.

Ethernet Data Input

PoE Input

DC output to router

Antenna MAX

Installation Recommendation

Wall Mount

Pole Mount

Vertical Pole

Horizontal Pole

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Installation Recommendation

Surface Mount

3M double sided adhesive pad

Deck Mount

ACW 651

ACW 653

Note: The deck mount kit is **NOT included** in the package.

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Packing List Information

Antenna

250

250

120

120
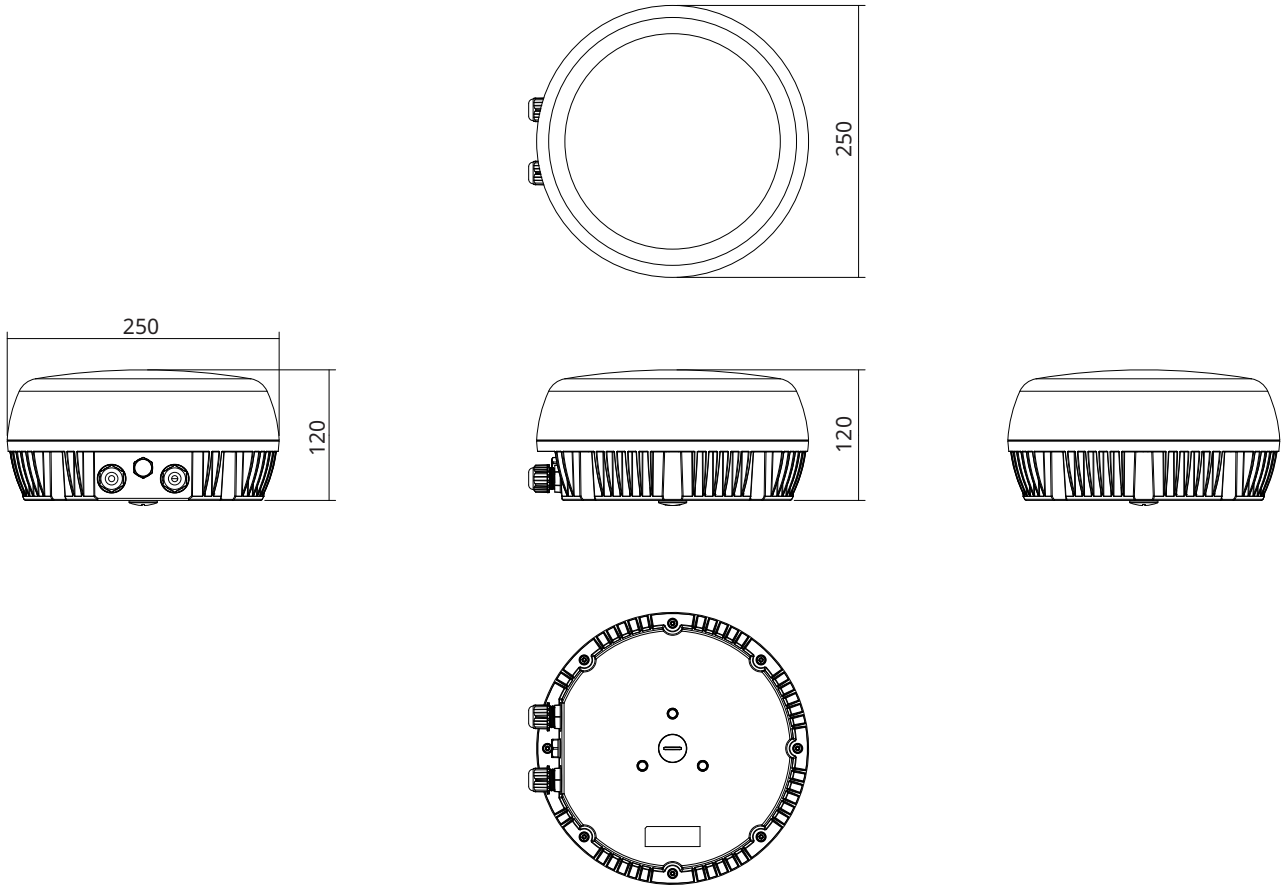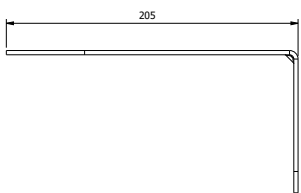
L-wrench for T20 bolts

Bolt
(4 pcs, T20 M4xL8)
Router

Bolt
(2 pcs, T20 M4xL8)
PoE

Bolt
(8 pcs, T20 M4xL12)
Cover

L-Mount Mount Set

205

110

100

90

20

M8*P1.25
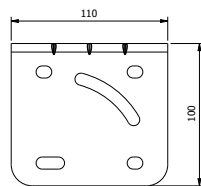
94.0

8.0

64.0
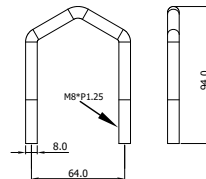
L-Mount
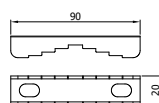
Bracket
(2 pcs)

V-bolt
(2 pcs)

V-bolt nut
(4 pcs, M8)