

ANTENNA MAX

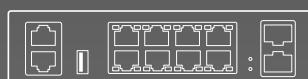
Maximum Flexibility, Maximum Gain
Outdoor Cellular / GPS Antenna + Enclosure

TAA
COMPLIANT



Achieve Near 0dB cable loss

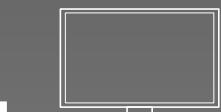
by eliminating RF cables from your setup.



Switch



Client devices

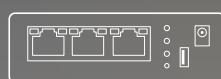


Conventional Antenna



5m RF cable 5dB+ cable loss

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



Router

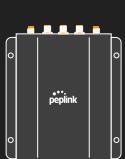


Maximum Durability

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

Maximum Flexibility

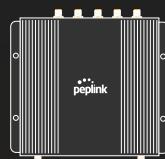
Mix-and-match the antenna with many routers including:



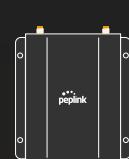
BR1 Mini Series ¹



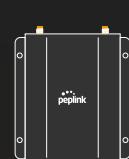
Transit Duo Pro ³



BR1 Pro 5G ³ / CAT20 ³



Adapter Series ^{2,3}



AP One Rugged

¹ BR1 Mini series: BR1 Mini, BR1 Mini Core, BR1 Mini 5G, BR1 Mini M2M.

² Adapter Series: POTS Adapter and MAX Adapter

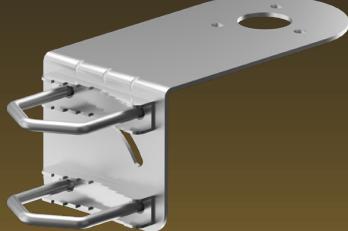
³ For certain products which do not support PoE In, a PoE Splitter is required.

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



Specification

Cellular		Wi-Fi	
Antenna Elements	4 elements	Antenna Elements	2 elements
Peak Gain & Frequencies	3.0dBi: 617-960MHz 6.2dBi: 1410-2700MHz 5.7dBi: 3400-4400MHz 6.6dBi: 5000-6000MHz	Peak Gain & Frequencies	5.4dBi: 2400-2500MHz 7.4dBi: 5000-6000MHz
VSWR	< 2.5 over 95% of the band	VSWR	< 2.5
Feed Power Handling	10W	Feed Power Handling	10W
Input Impedance	50 Ω	Input Impedance	50 Ω
Polarisation	Linear	Polarisation	Linear
Connectors	Right angle SMA male	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.

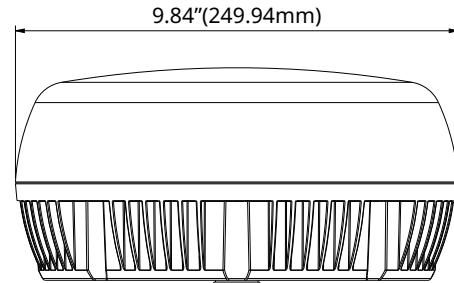
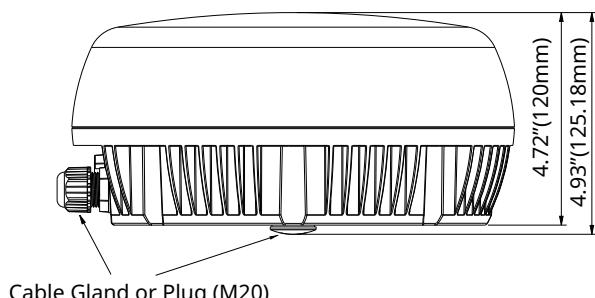
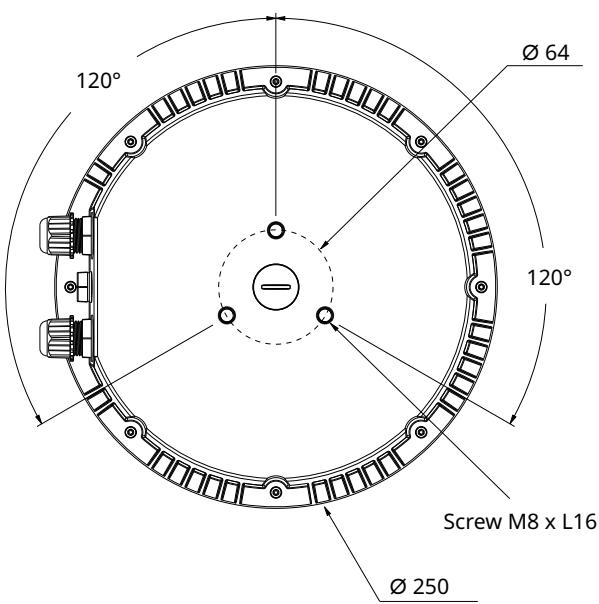
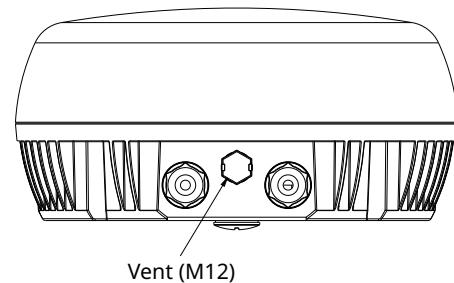
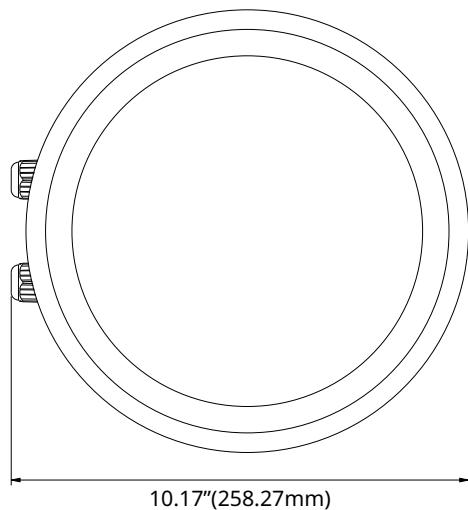
Specification

Mounting		Mechanical	
Supported Types	Surface, wall, pole	Product Dimensions	4.72" / 120 mm - Height 9.84" / 250 mm - Diameter
Package Contents		Packaged Dimensions	13.82" x 11.61" x 5.75" 351x295x146mm
Package Contents	Antenna MAX L-Mount Set Double sided 3M adhesive pad 3pcs Cable Gland 2pcs Hole Plug	Enclosure Material	UV stable PC
Environmental, Compliance			
IP Rating	IP68	Compliance	ROHS, REACH, WEEE
Operating Temperature	-40° - 176°F / -40° - 80°C	Enclosure Flammability	UL 94 V-0 (1.47 mm)
Storage Temperature	-40° - 176°F / -40° - 80°C	UV resistance	UL 746C (F1 long-term UV exposure)
		Salt Spray	MIL-STD 810F/ASTM B117

Ordering Information

Product Code	Description
ANT-MAX	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White

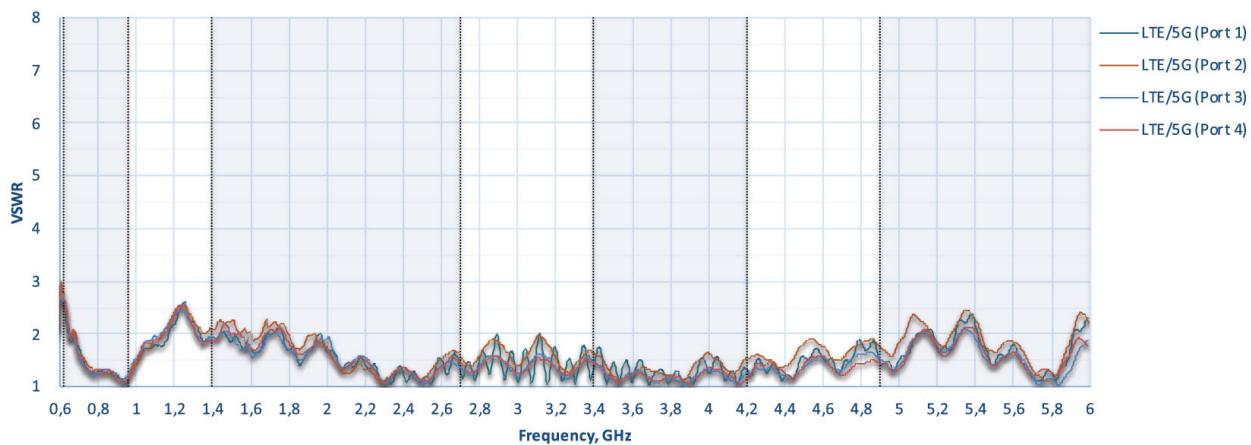
Technical Drawing



Cellular Antenna Performance

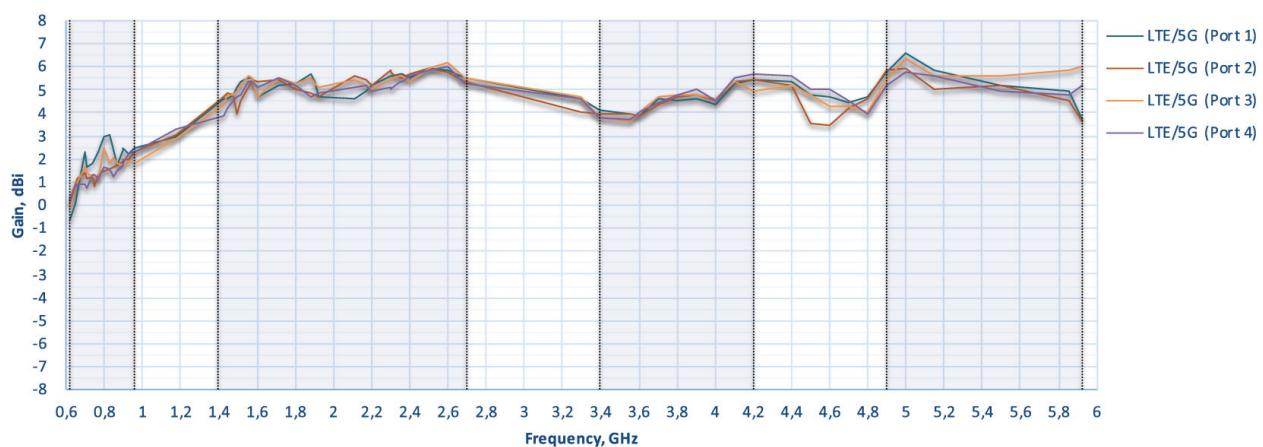
Cellular Antenna VSWR

LTE/5G VSWR



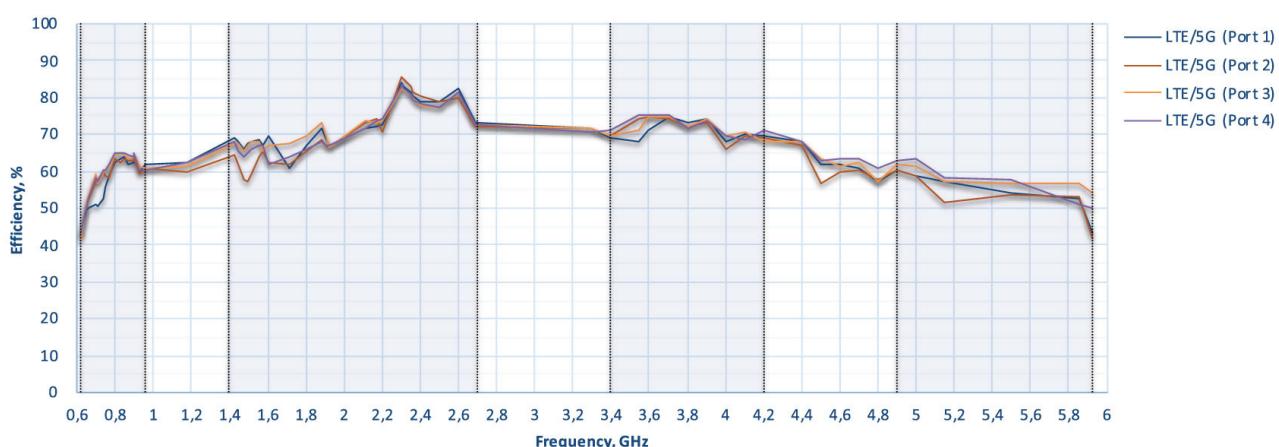
Cellular Antenna Gain

Peak Gain



Cellular Antenna Efficiency

Efficiency

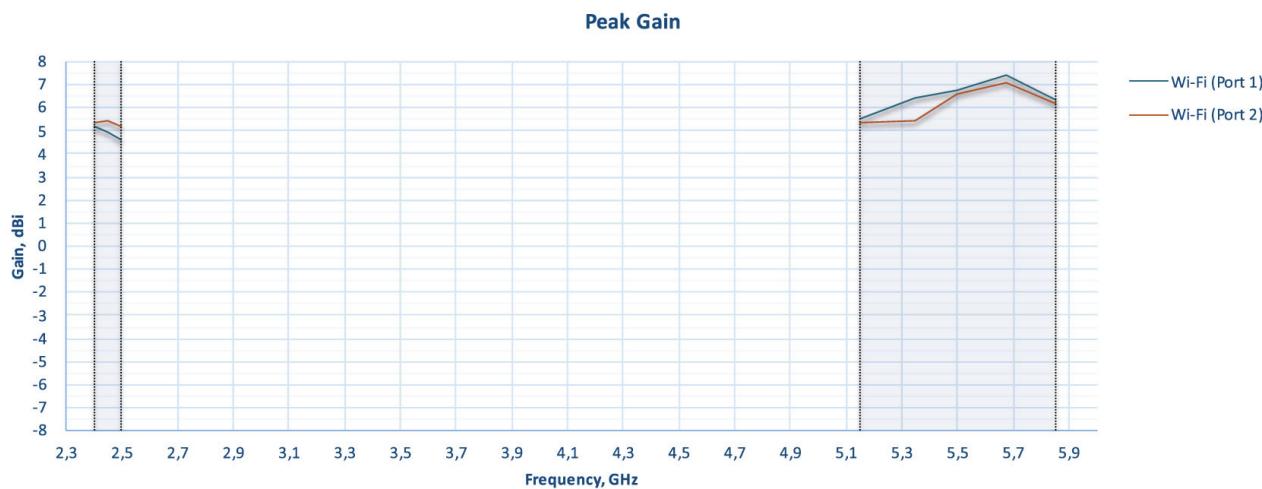


Wi-Fi Antenna Performance

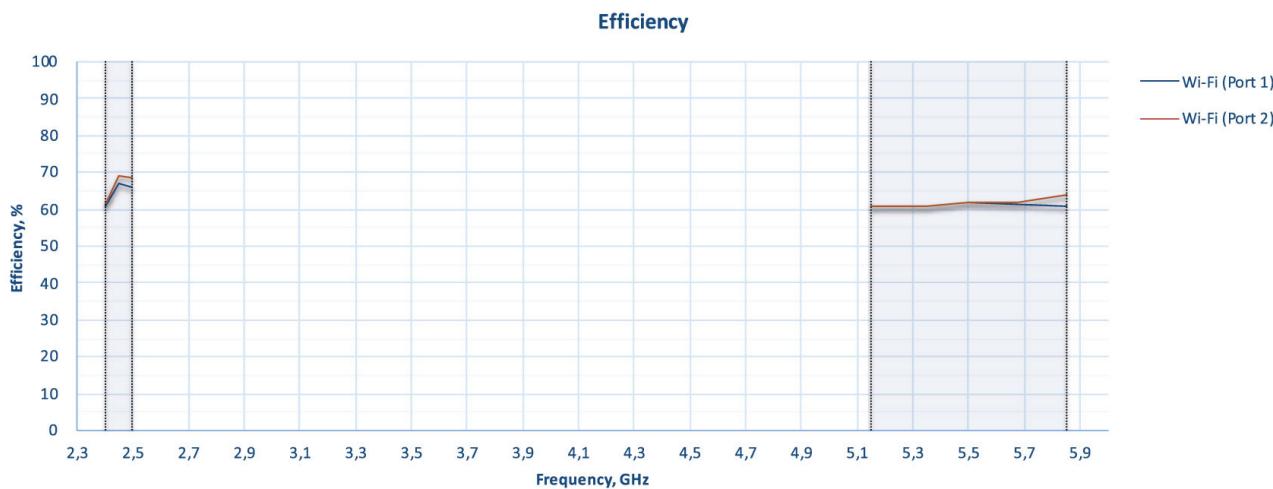
Wi-Fi Antenna VSWR



Wi-Fi Antenna Gain



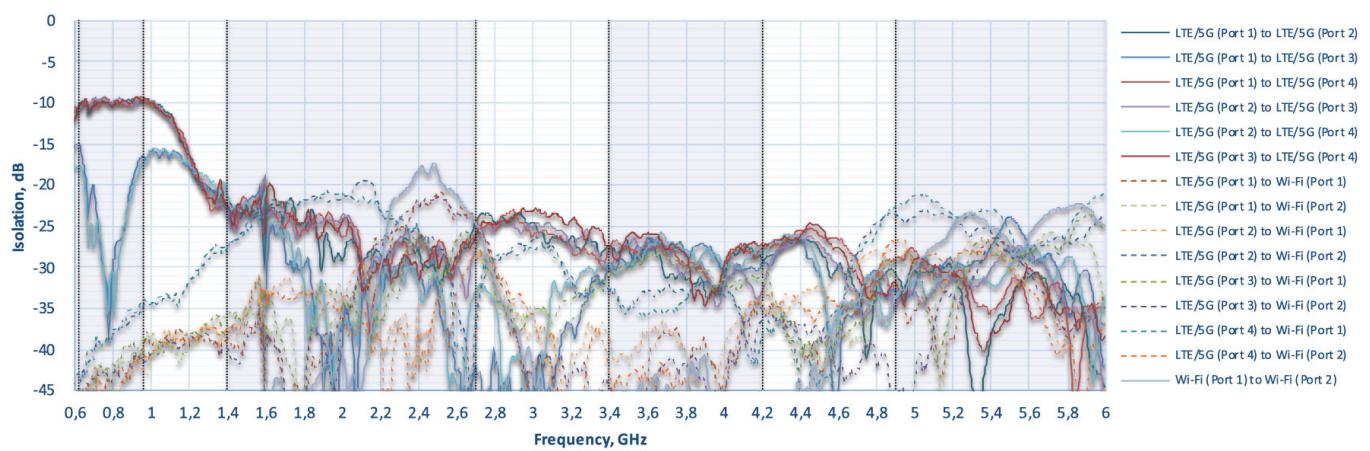
Wi-Fi Antenna Efficiency



Cellular & Wi-Fi Antenna Performance

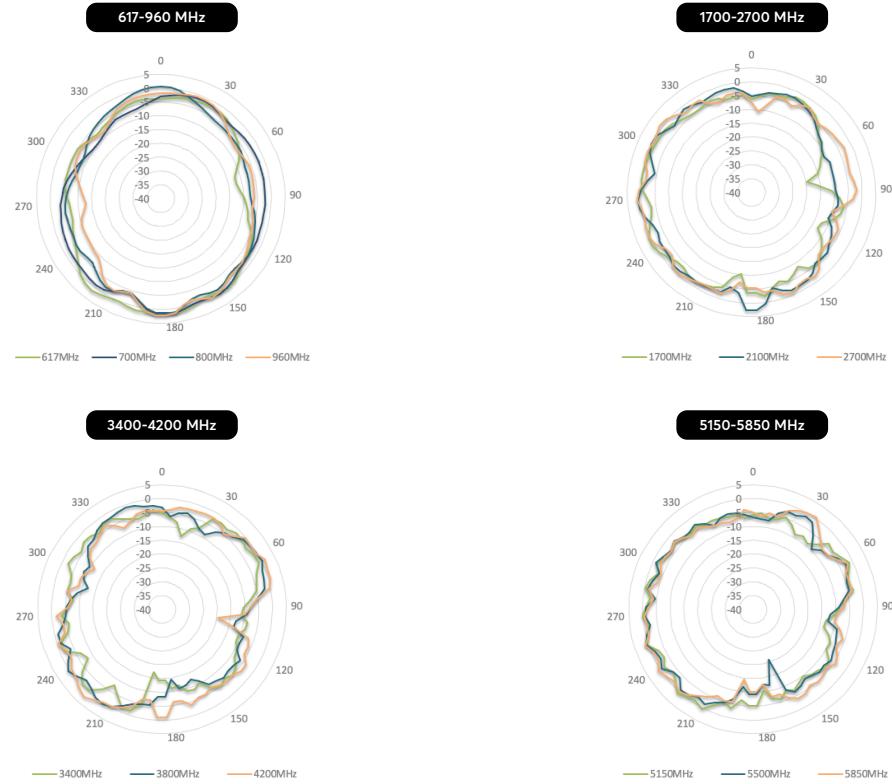
Cellular & Wi-Fi Antenna Isolation

LTE/5G and Wi-Fi antenna elements isolation

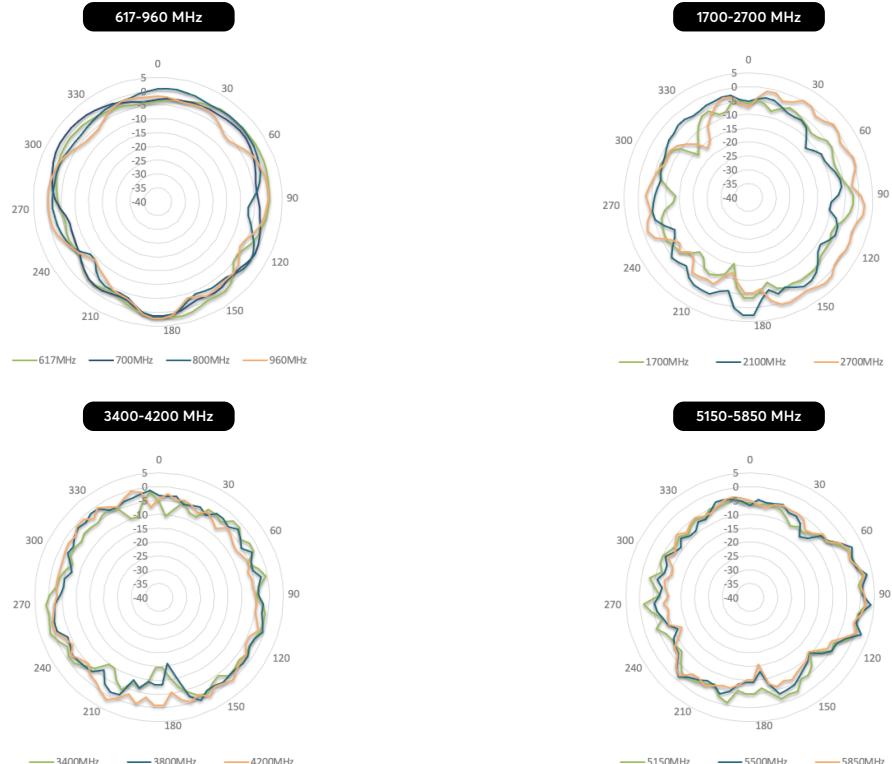


Radiation Pattern

LTE Radiation Patterns (Elevation 1)



LTE Radiation Patterns (Elevation 2)

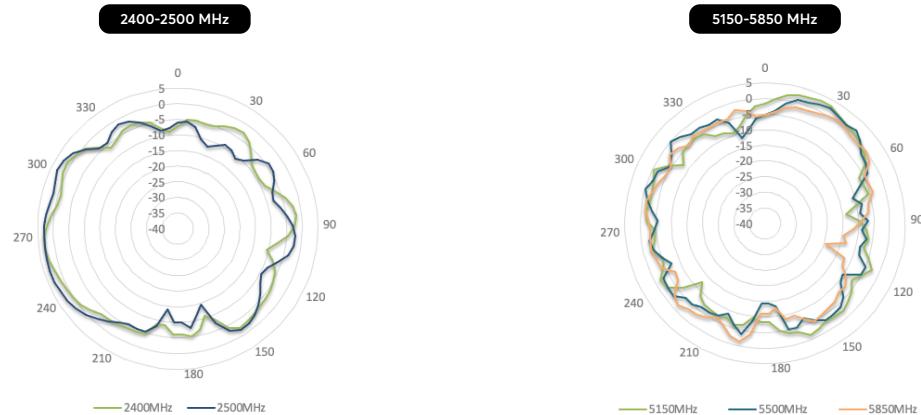


Radiation Pattern

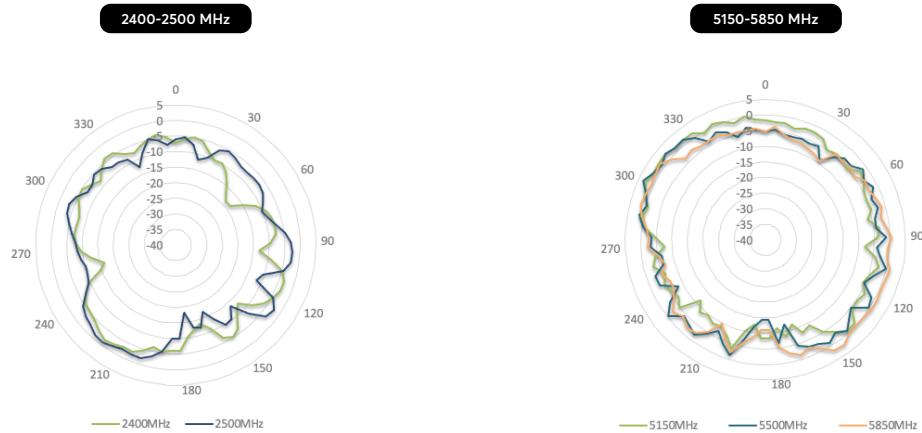
Wi-Fi Radiation Patterns (Azimuth)



Wi-Fi Radiation Patterns (Elevation 1)



Wi-Fi Radiation Patterns (Elevation 2)

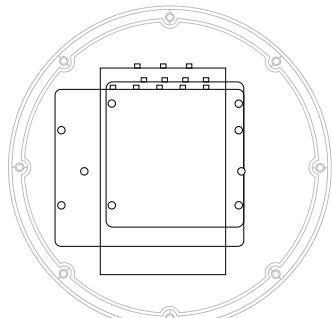


Antenna MAX



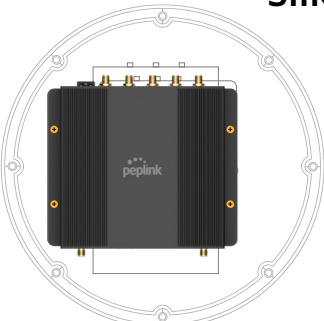
Installation Recommendation

Position Router

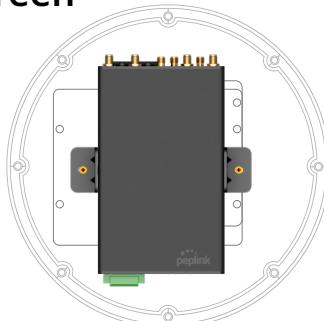


Make sure you align the router with the placement mark on the silkscreen.

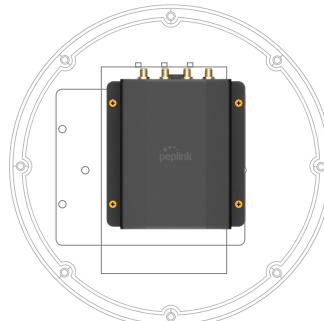
Silkscreen



BR1 Pro 5G

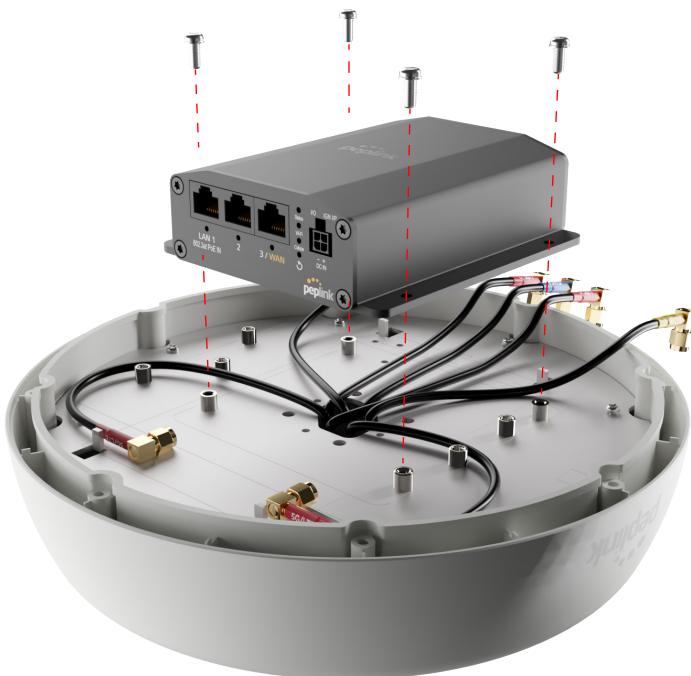


Transit Duo Pro



BR1 Mini Series

Install Router



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



Installation Recommendation

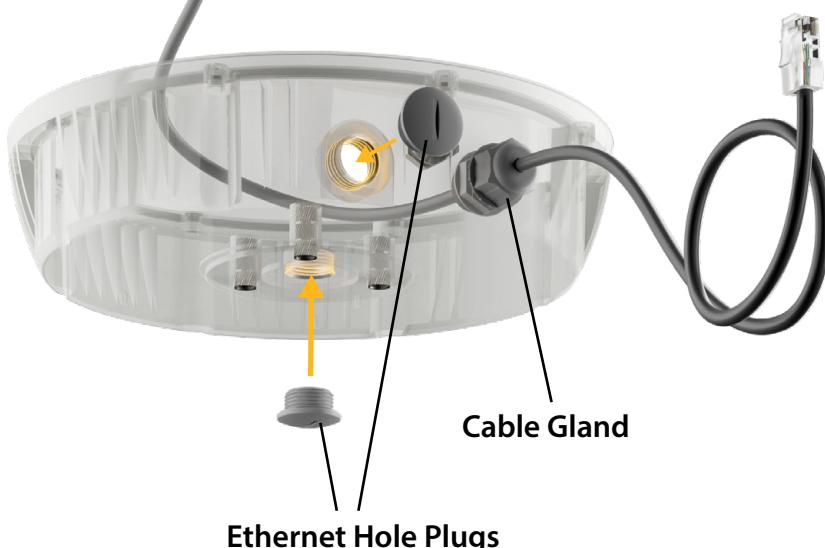
Connect Cables to Router

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



Step 2

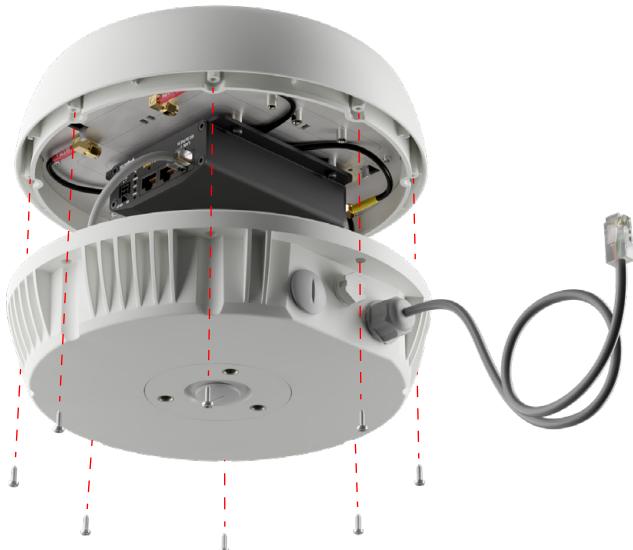
Ethernet cable can be connected via the bottom or side cable gland on the device.

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

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

Installation Recommendation

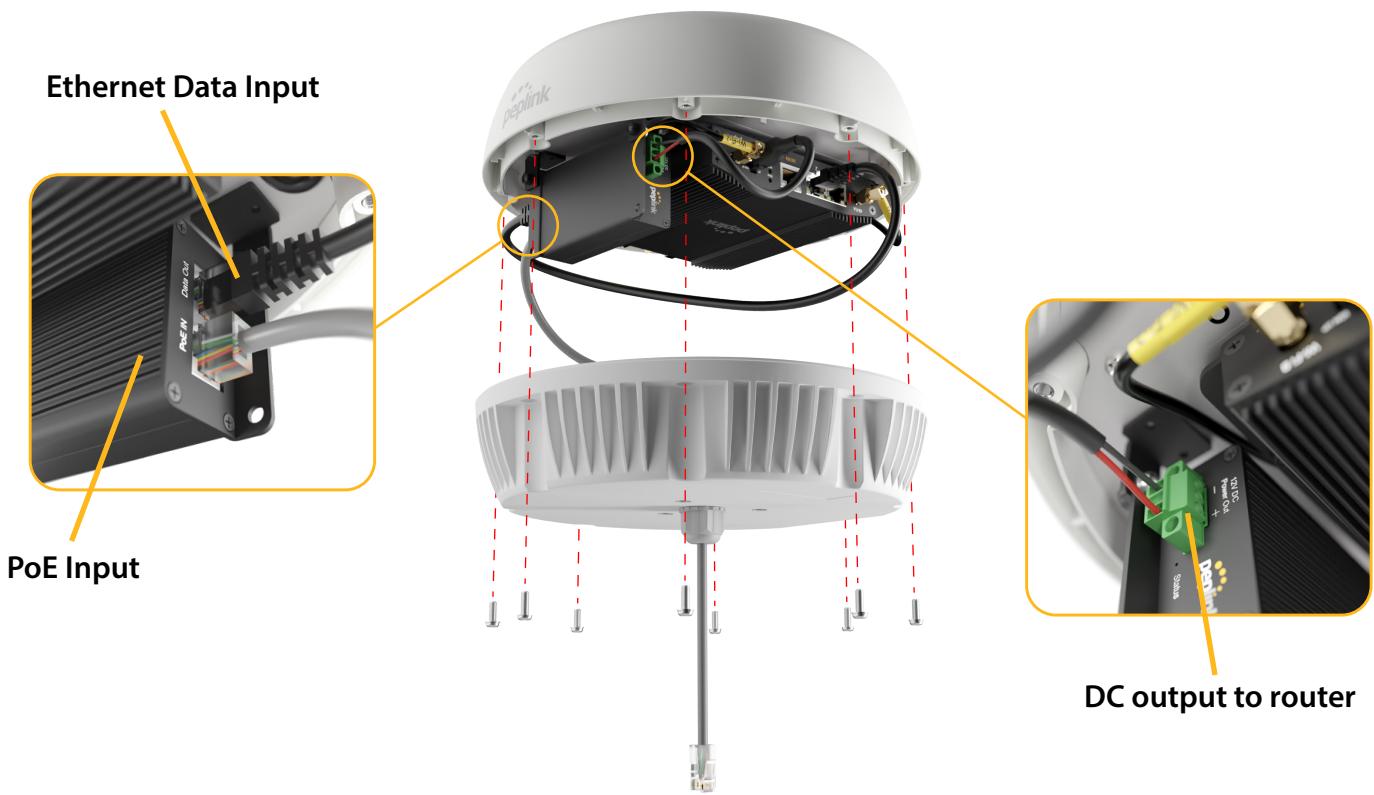
Attach Bottom Cover



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.



Antenna MAX



Installation Recommendation

Wall Mount



Pole Mount



Vertical Pole



Horizontal Pole

Antenna MAX



Installation Recommendation

Surface Mount



3M double sided adhesive pad

Deck Mount



ACW 651

ACW 653A

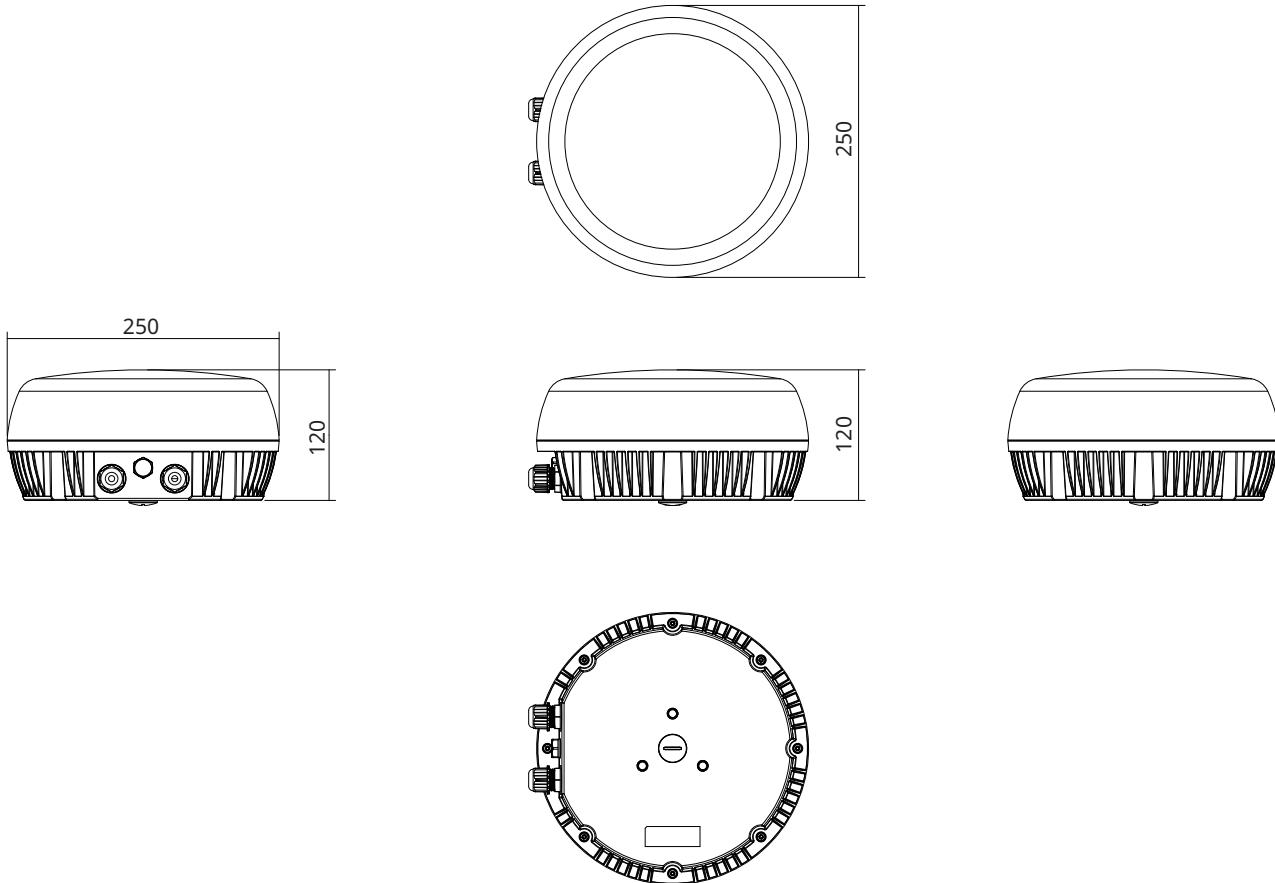
Note: The deck mount kit is **NOT included** in the package.

Antenna MAX



Packing List Information

Antenna



L-wrench for T20 bolts



Bolt
(4 pcs, T20 M4xL8)
Router

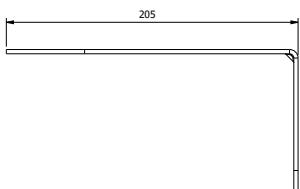


Bolt
(2 pcs, T20 M4xL8)
PoE

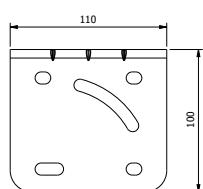


Bolt
(8 pcs, T20 M4xL12)
Cover

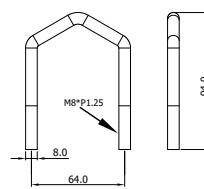
L-Mount Set



L-Mount



Bracket
(2 pcs)



V-bolt
(2 pcs)



Hex Socket
(3pcs, H6, M8xL20)



V-bolt nut
(4 pcs, M8)