

PEPWAVE



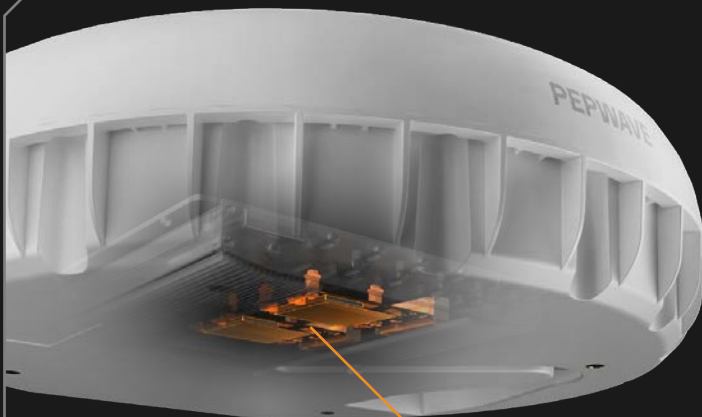
Antenna **MAX Duo**

- **Twice the Connectivity. One Seamless Enclosure.** •
Integrated Dual-Modem or Dual-Router Antenna Housing

TAA 
COMPLIANT

MAXed Out Synergy

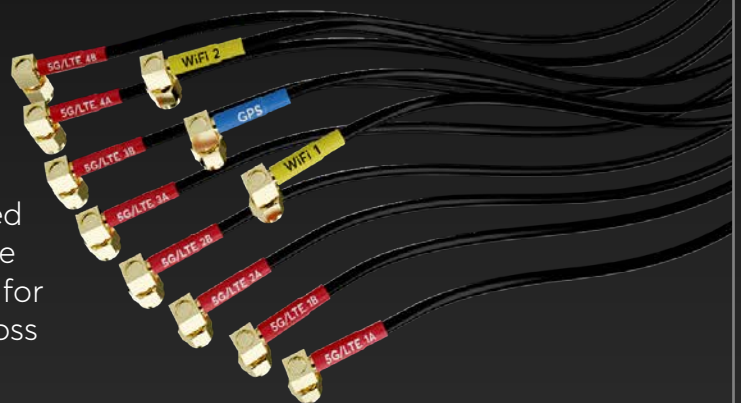
Two Modems.
One Setup.
Unlimited Possibilities.



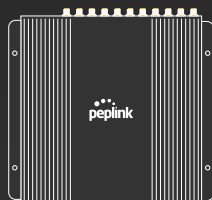
2x

5G/LTE
Modem

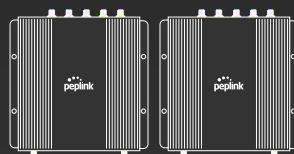
Featuring **8x 5G/LTE**, **2x Wi-Fi**, and **GPS** antenna elements, the Antenna MAX Duo delivers reliable connectivity using **two modems** housed in a single, ruggedized enclosure. The integrated design removes the need for external RF cabling, reducing signal loss and setup complexity.



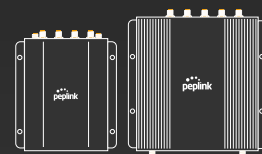
- Supported dual-modem Peplink router setups include:



[BR2 Pro]



[2x BR1 Pro 5G]*

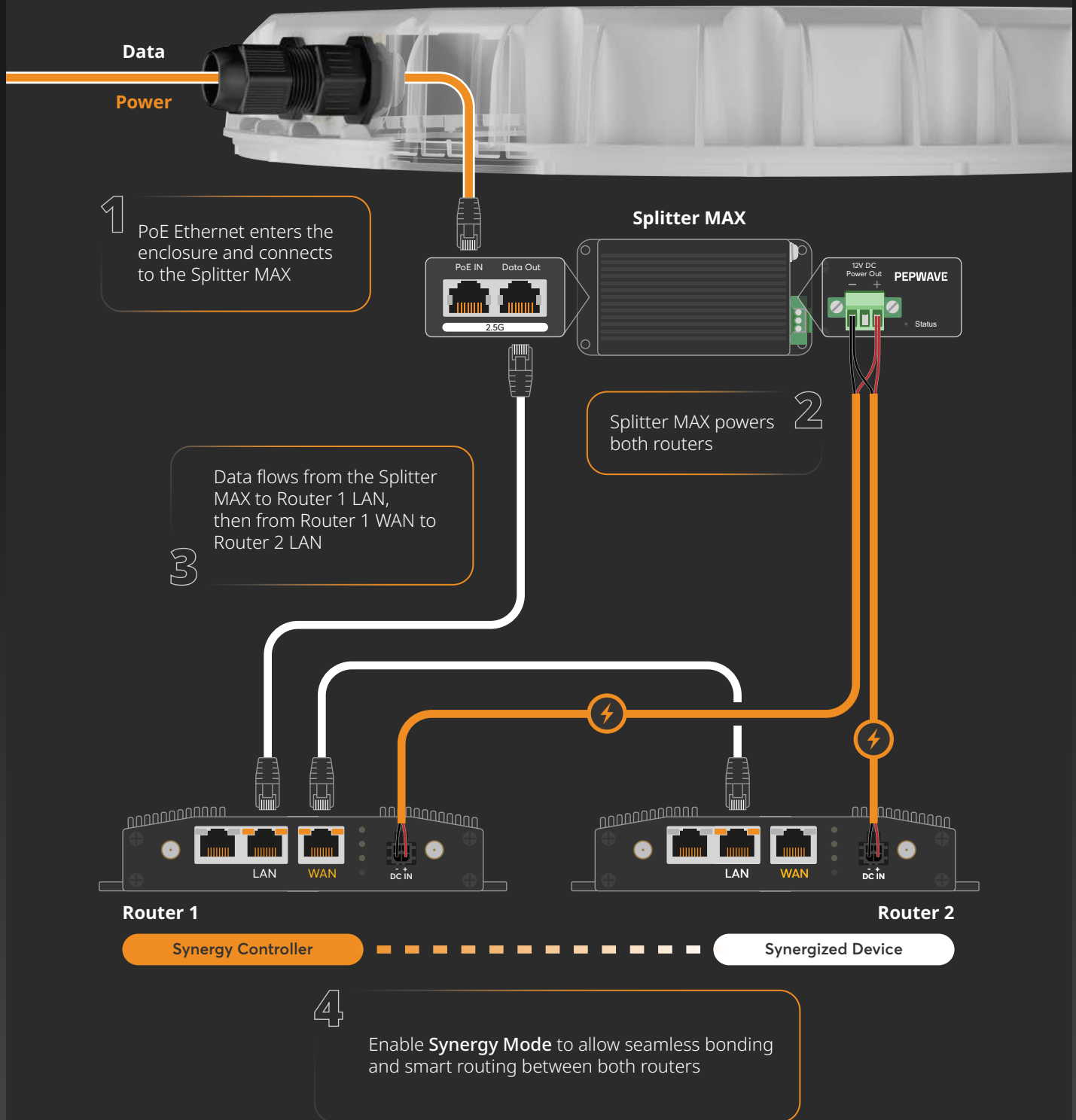


[BR1 Mini 5G + BR1 Pro 5G]*

*Splitter MAX is required to provide power when more than one router is used.

Using the Splitter MAX, both connectivity and power are managed through a single PoE cable, simplifying installation and reducing cable clutter.

- Suggested cable path for dual-router setups:





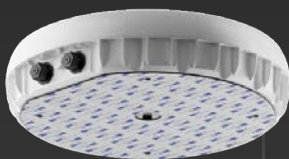
MAXed Out Ruggedness

Built to endure the elements, the Antenna MAX Duo is engineered for harsh environments with a **UV-stable, waterproof IP67-rated** enclosure and **flame-retardant, UV-resistant** plastics. Compliant with **MIL-STD 810F salt spray standards**, it's ready to perform reliably on land, at sea, and on the move.

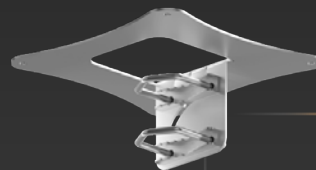
MAXed Out Flexibility

Whether installed on a vessel, vehicle, or fixed location, the Antenna MAX Duo adapts to your deployment.

- Set it up how you see fit with multiple mounting options:

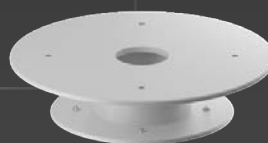


Surface Mount



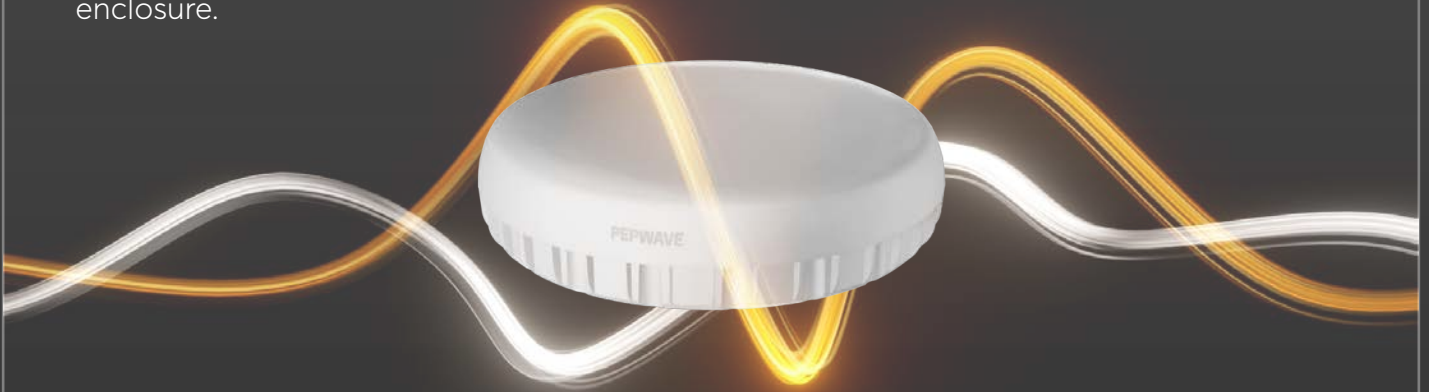
Pole Mount
(vertical or horizontal)

Compatible with standard 3rd party maritime
VSAT dome mounts
(not included in package)

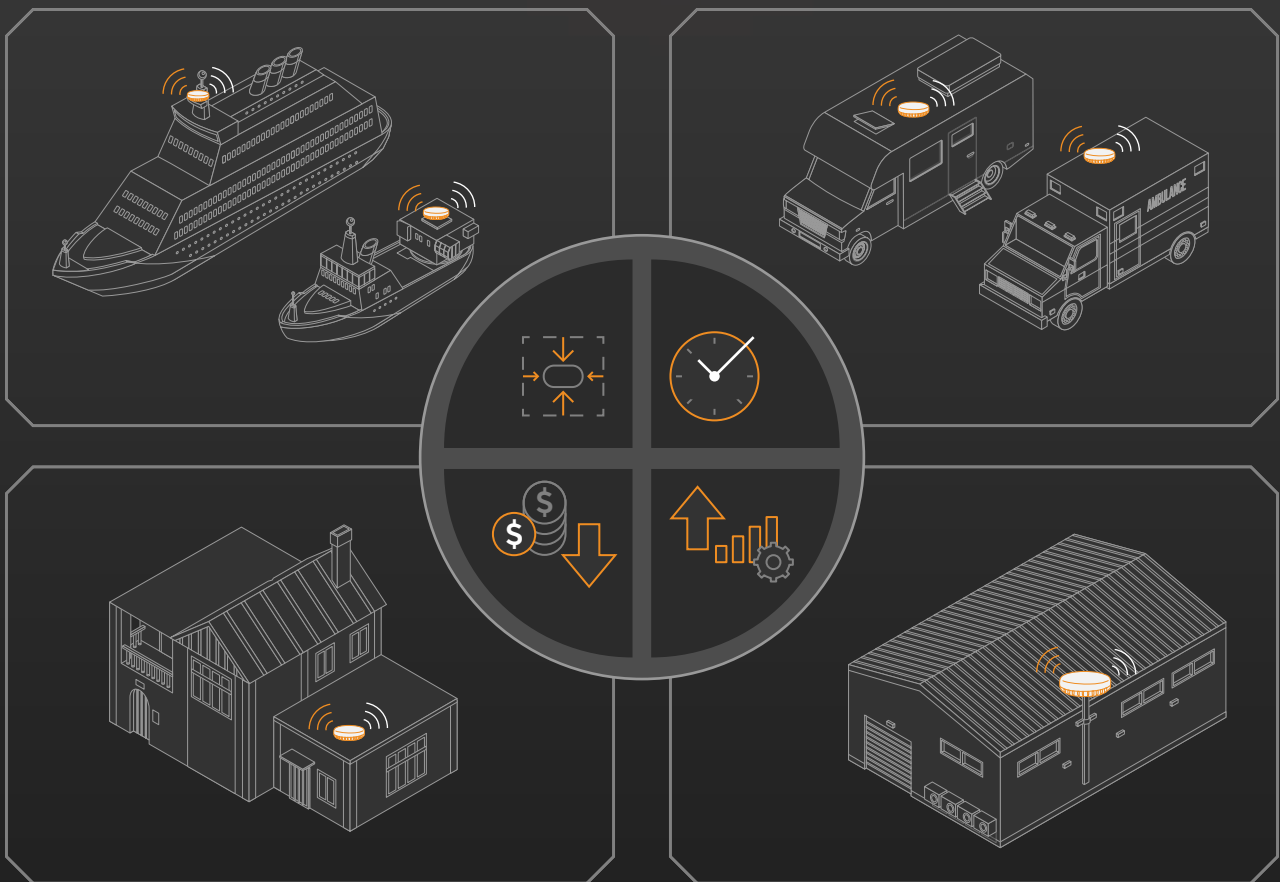


MAXed Out Savings

The **Antenna MAX Duo** delivers unmatched value by combining high-performance antenna arrays, robust protection, and dual-modem support into a single, compact enclosure.



It's a **space-efficient, time-saving, cost-effective, and performance-maximizing solution** for maritime, mobile, enterprise, and remote deployments.





Specifications

Cellular		Wi-Fi	
Antenna Elements	8 elements	Antenna Elements	2 elements
Peak Gain & Frequencies	5.6dBi: 617-960MHz 6.5dBi: 1410-2700MHz 8.1dBi: 3400-4400MHz 7.4dBi: 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.

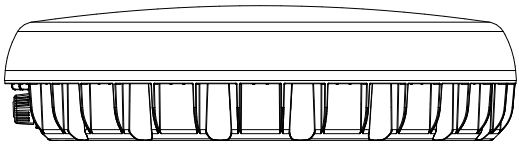
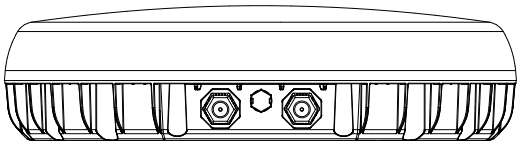
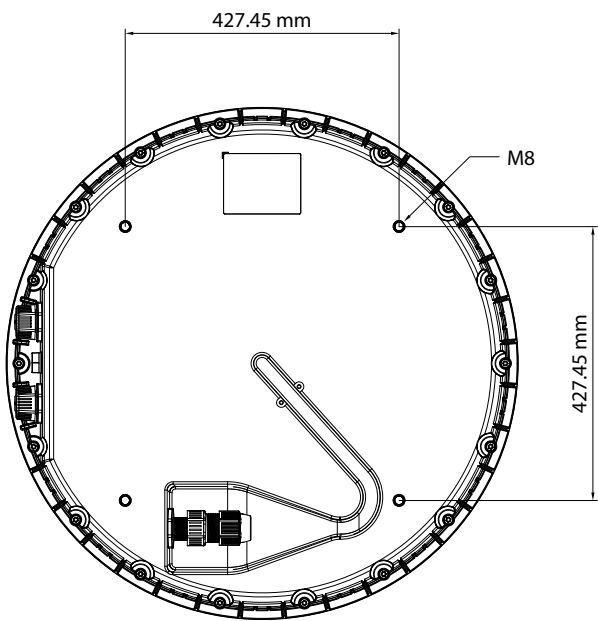
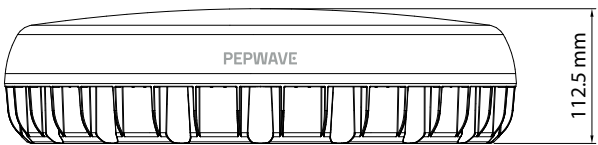
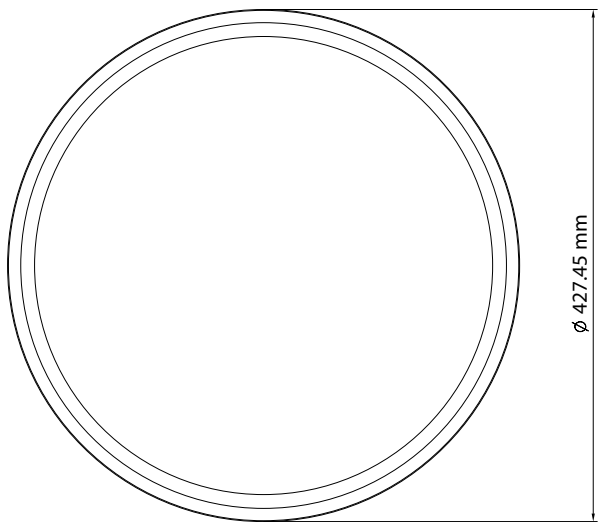
Specifications

Mounting		Mechanical	
Supported Types	Surface, Pole	Product Dimensions	4.82" / 122.5 mm - Height 16.83" / 427.5 mm - Diameter
Package Contents		Packaged Dimensions	21.97" x 25.51" x 16.46" / 558 x 648 x 418 mm
Package Contents	Antenna MAX Duo L-Mount Set Router fixation screws 5pcs Rubber Support TNF-19 3pcs Rubber Support TF-039 3pcs RJ45 glands 2pcs RJ45 caps 1pcs Double sided 3M adhesive pad 1pcs Ethernet cable (9.84" / 250mm) 1pcs Ethernet cable (14.96" / 380mm)	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)
Storage Temperature	-40° - 176°F / -40° - 80°C	UV resistance	UL 746C (F1 long-term UV exposure)
		Salt Spray	MIL-STD 810F/ASTM 8117

Ordering Information

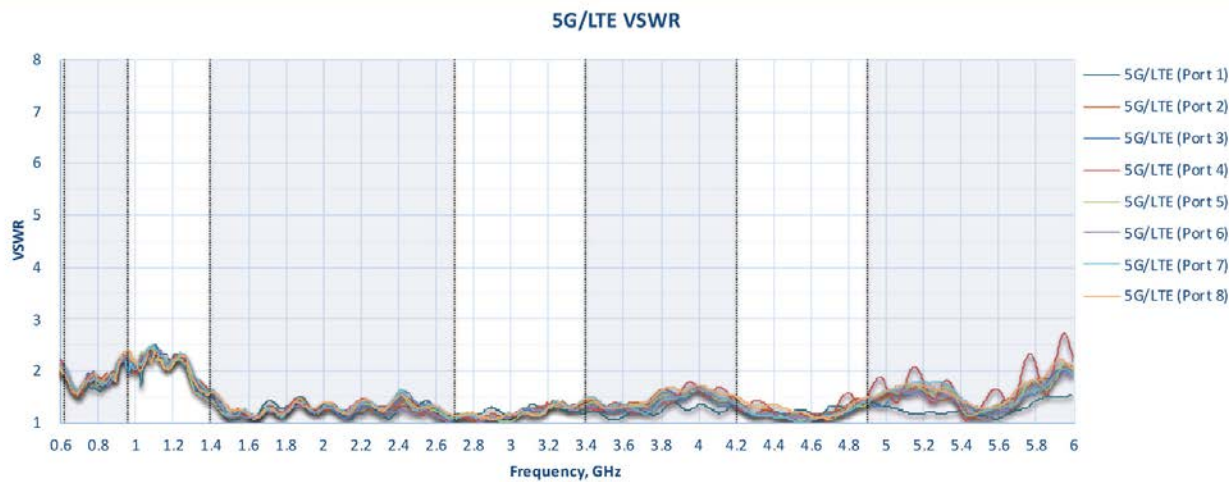
Product Code	Description
ANT-MAX-DUO	8xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP67, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White

Technical Drawing



Cellular Antenna Performance

Cellular Antenna VSWR



Cellular Antenna Gain



Cellular Antenna Efficiency

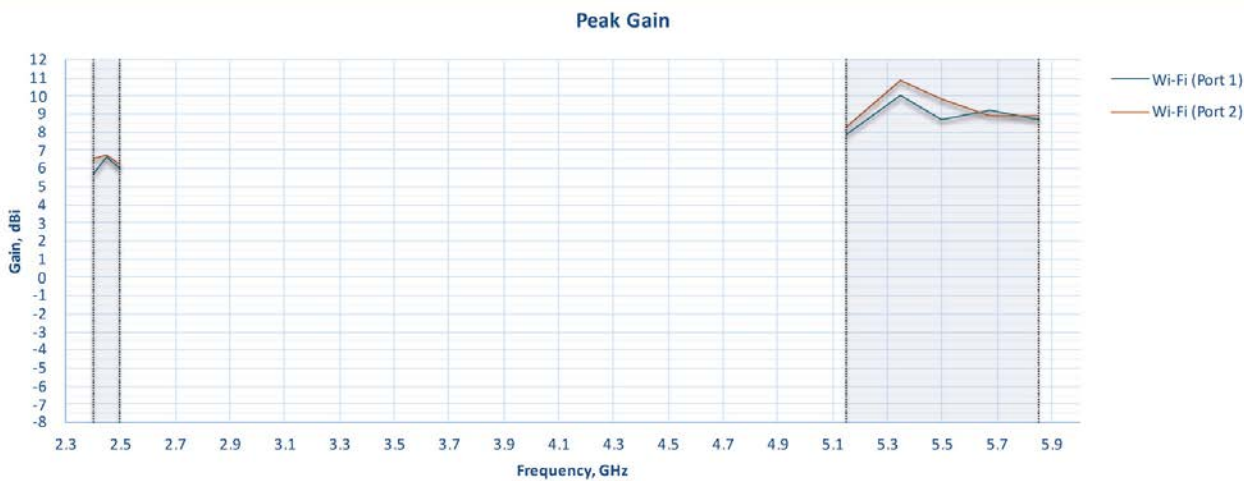


Wi-Fi Antenna Performance

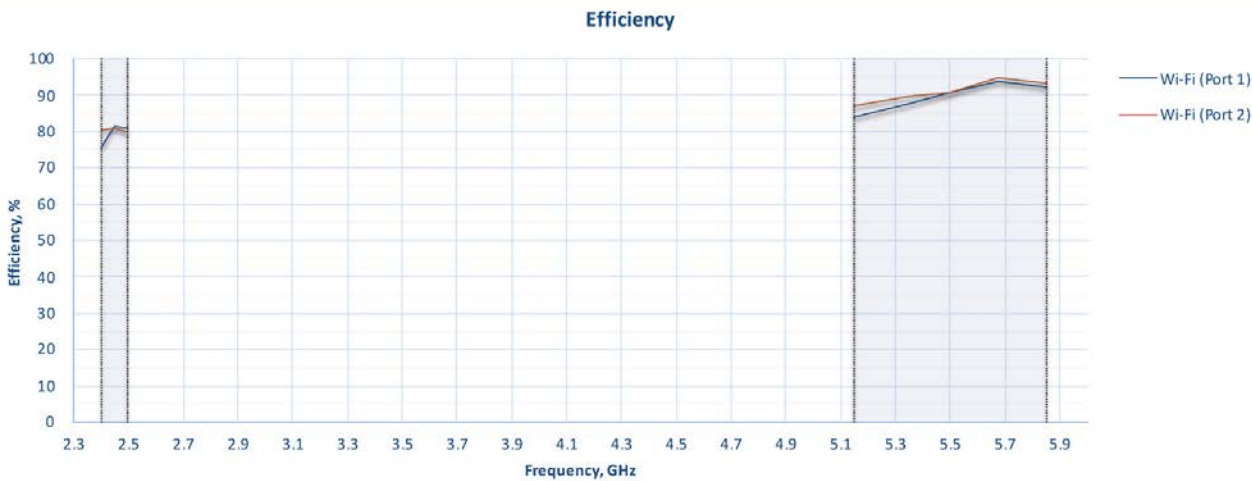
Wi-Fi Antenna VSWR



Wi-Fi Antenna Gain

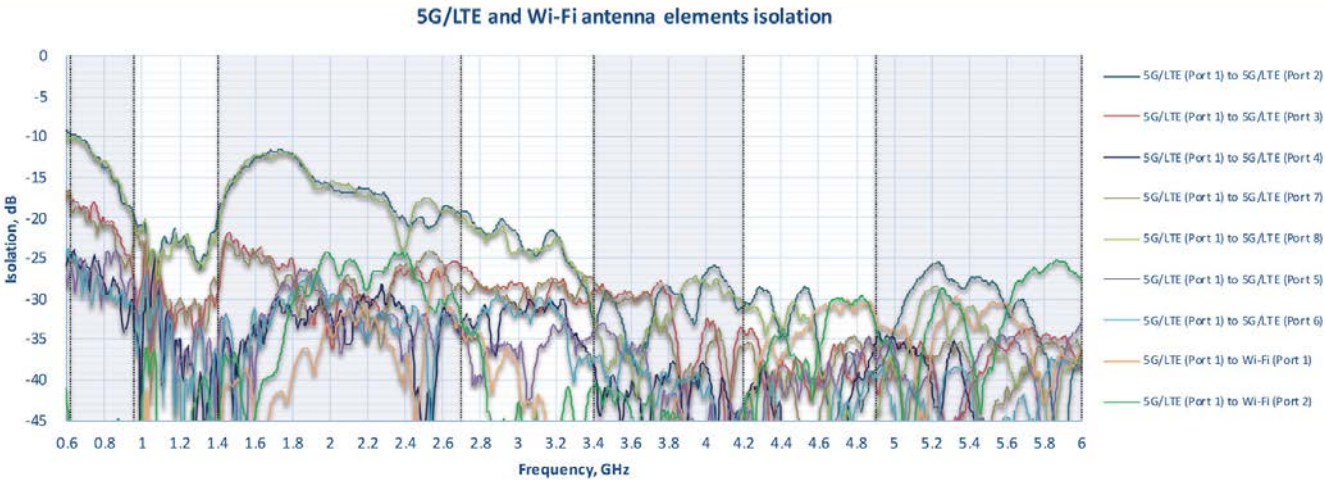


Wi-Fi Antenna Efficiency



Cellular & Wi-Fi Antenna Performance

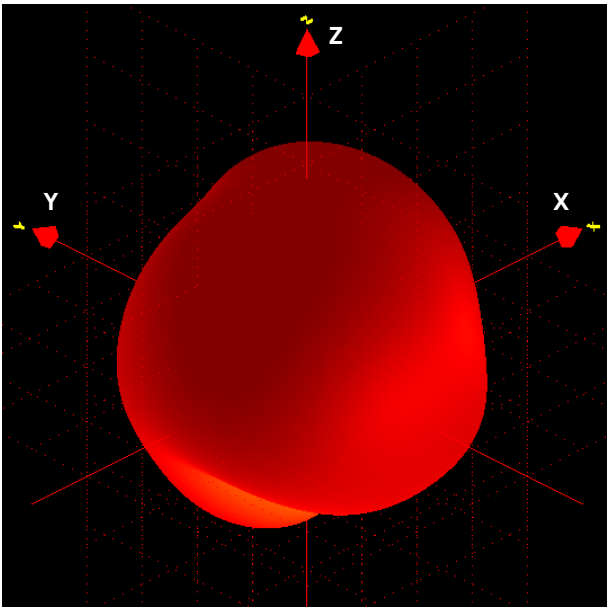
Cellular & Wi-Fi Antenna Isolation



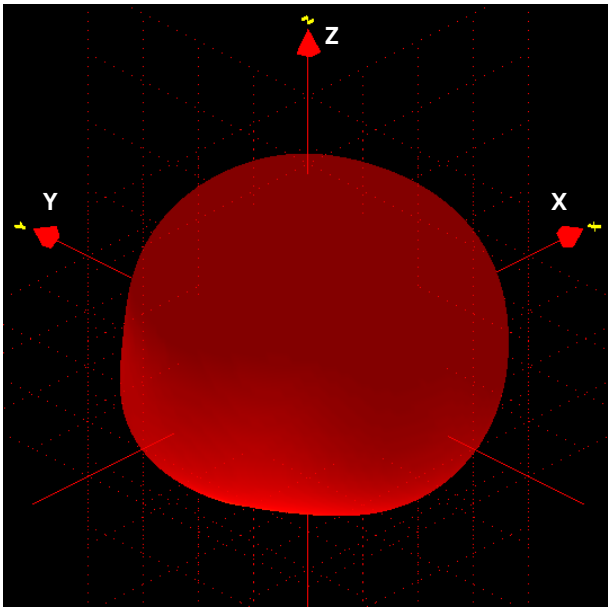
Cellular & Wi-Fi Antenna Performance

Typical Radiation Pattern

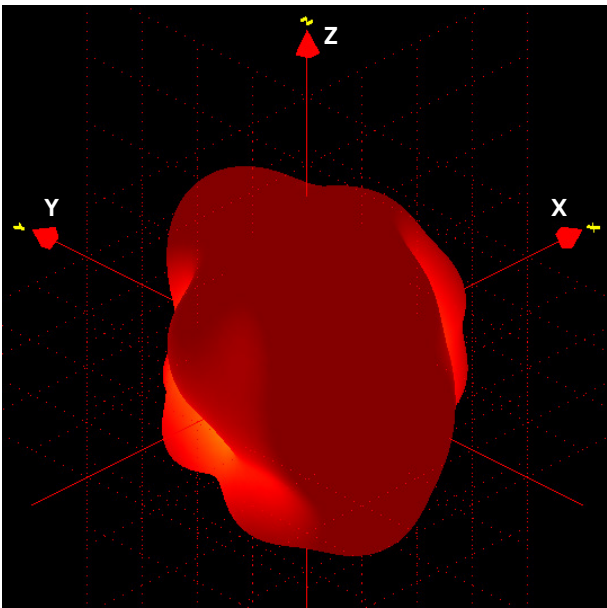
617 MHz



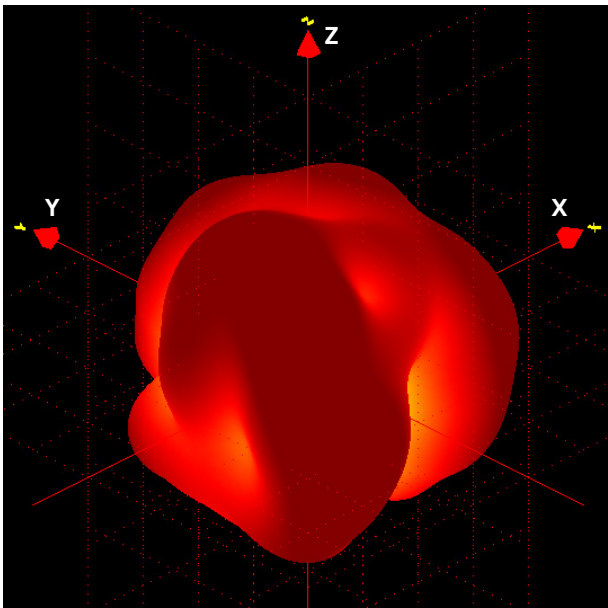
798 MHz



1496 MHz



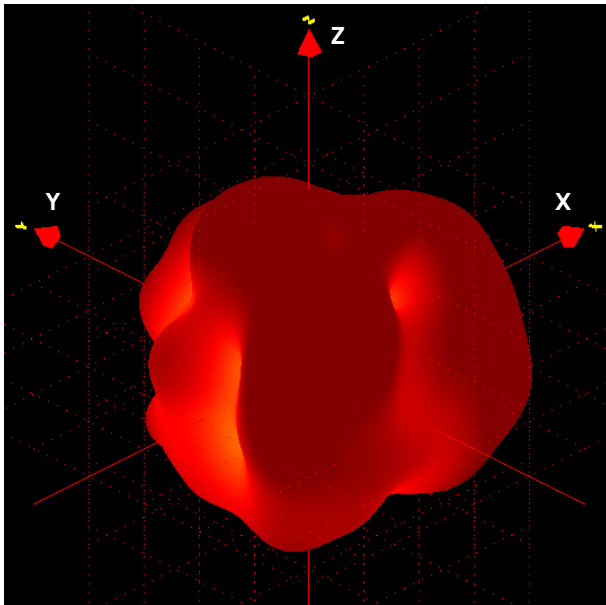
1805 MHz



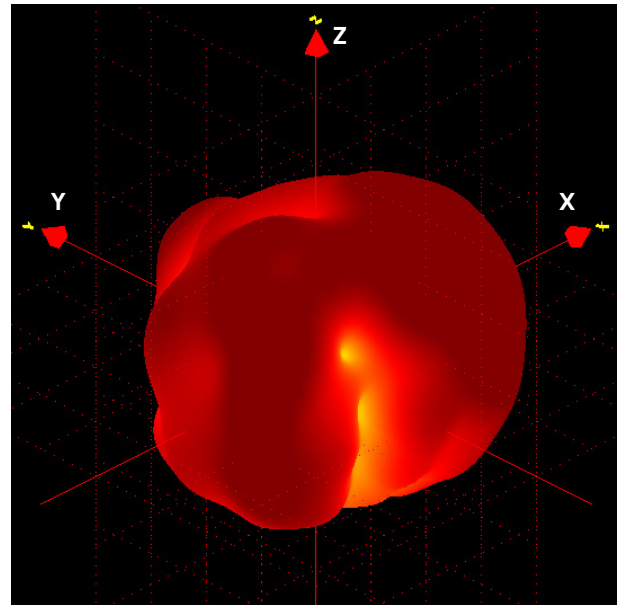
Cellular & Wi-Fi Antenna Performance

Typical Radiation Pattern

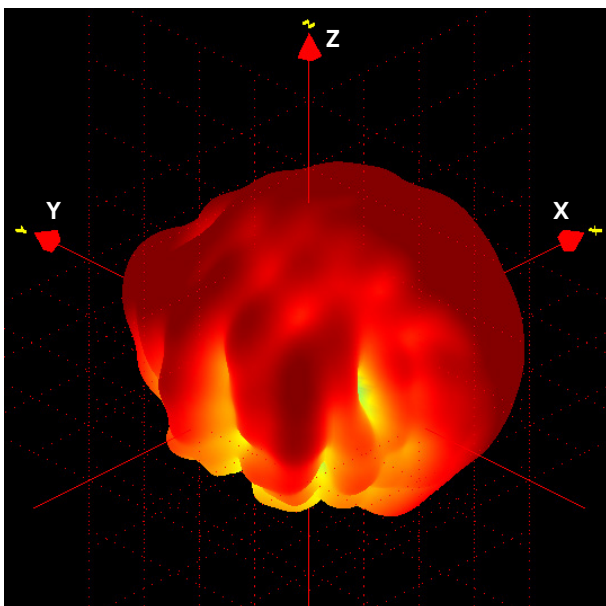
2110 MHz



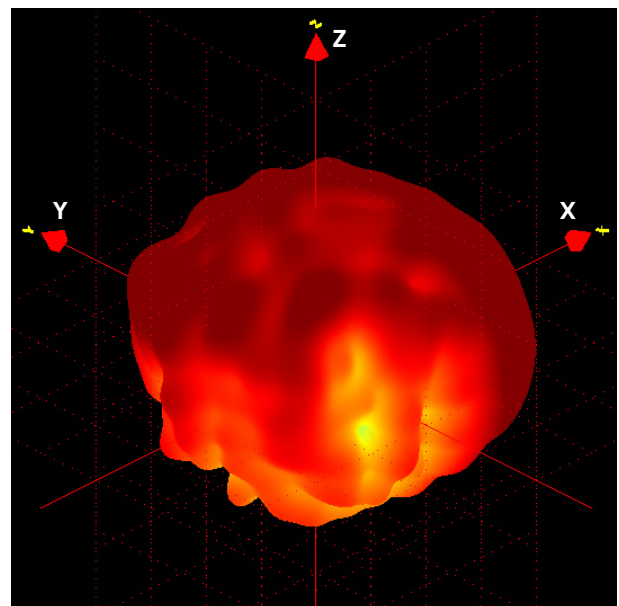
2400 MHz



3550 MHz

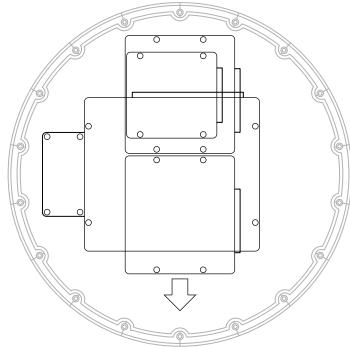


3800 MHz



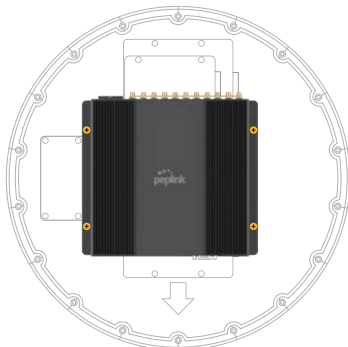
Installation Recommendation

Position Router

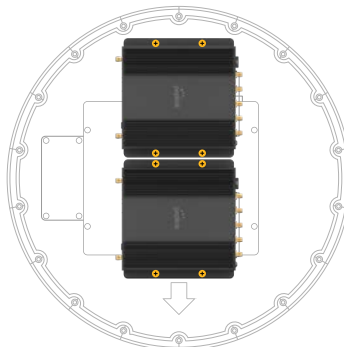


Silkscreen

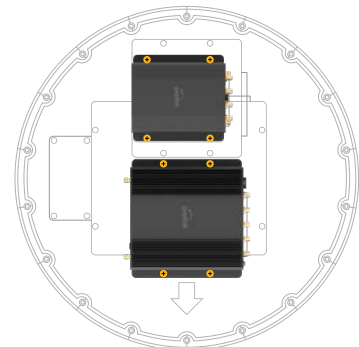
Make sure you align the router with the placement mark on the silkscreen.



BR2 Pro

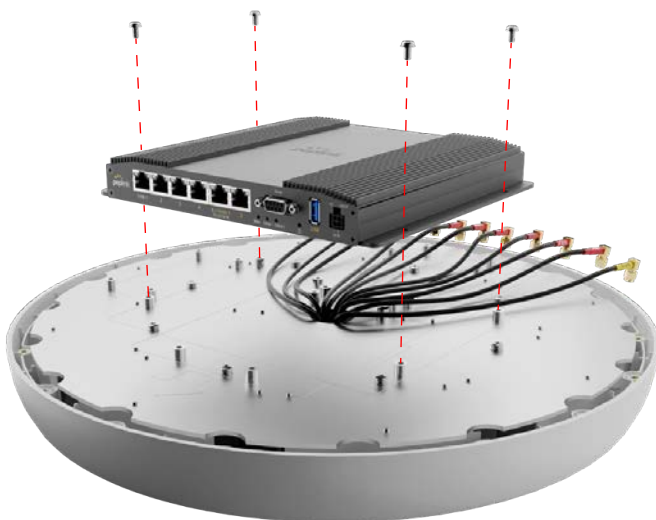


BR1 Pro 5G + BR1 Pro 5G



BR1 Pro 5G + BR1 Mini 5G

Install Router



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



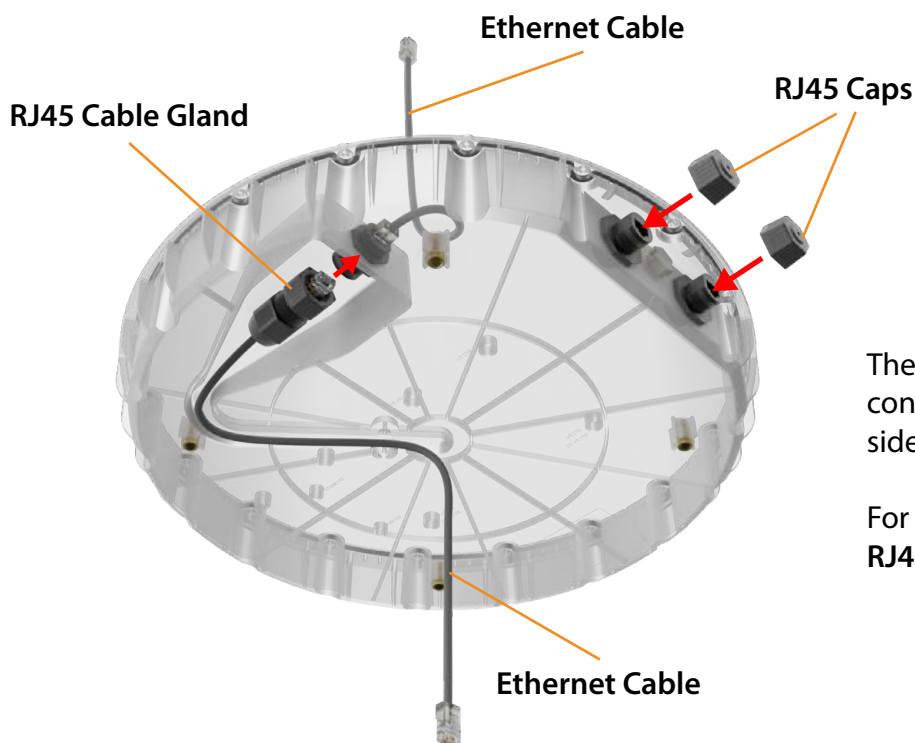
Installation Recommendation

Connect Cables to Router

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



Ethernet Cable

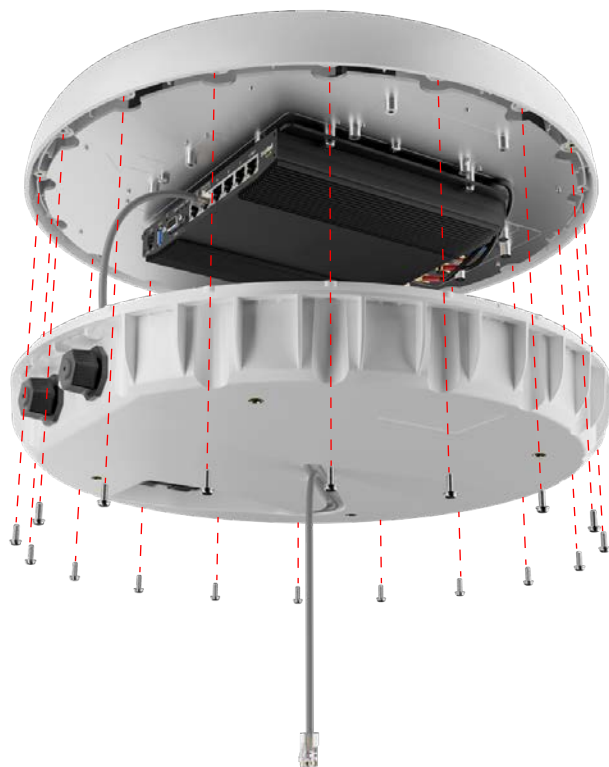


The Ethernet cable can be connected via the bottom or side cable gland on the device.

For any unused hole, use a **RJ45 Cap** to securely seal it.

Installation Recommendation

Attach Bottom Cover



Then connect the Ethernet cable to the **Power over Ethernet (PoE) input port** of the router. After that, align the bottom cover with the top cover, secure it in place, and then tighten the screws.

Install PoE Splitter

DC Output to Two Routers

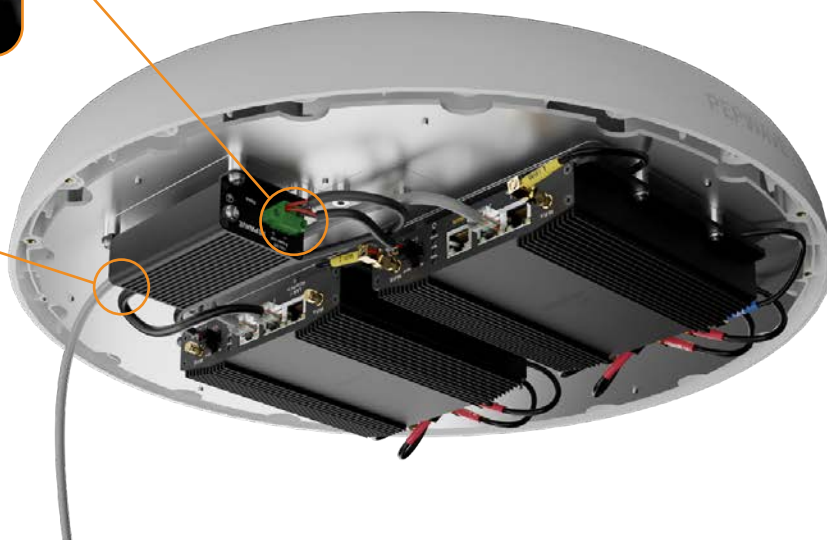


When using multiple routers (e.g. two BR1 Pro 5G), a PoE Splitter (e.g. Splitter MAX) should be used to provide power to each device.



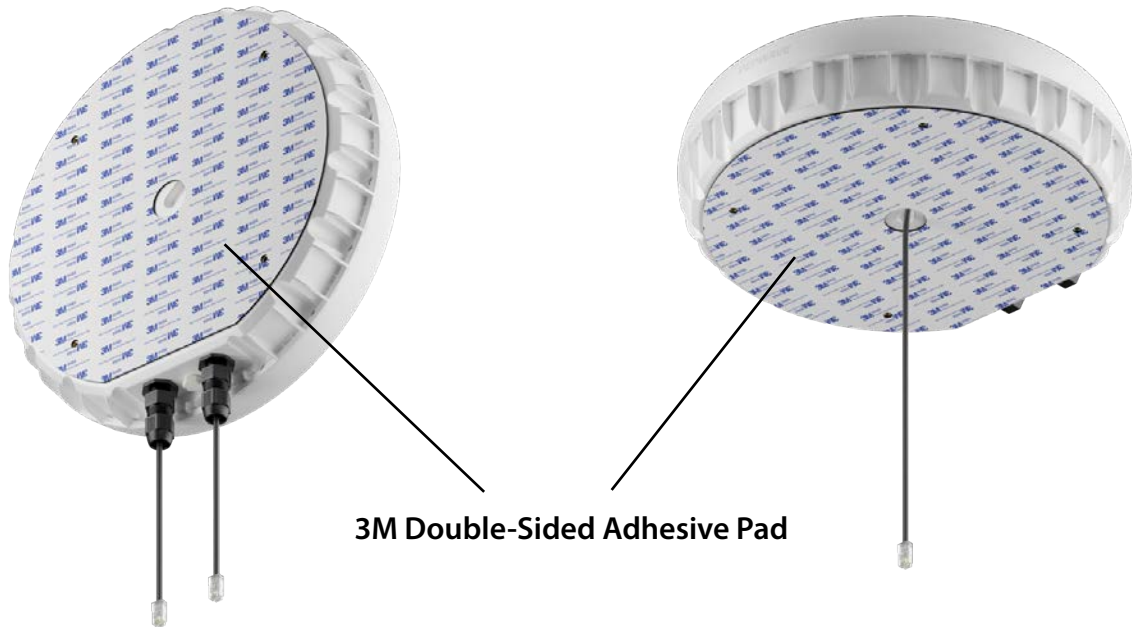
Data Output

PoE Input



Installation Recommendation

Surface Mount



Pole Mount



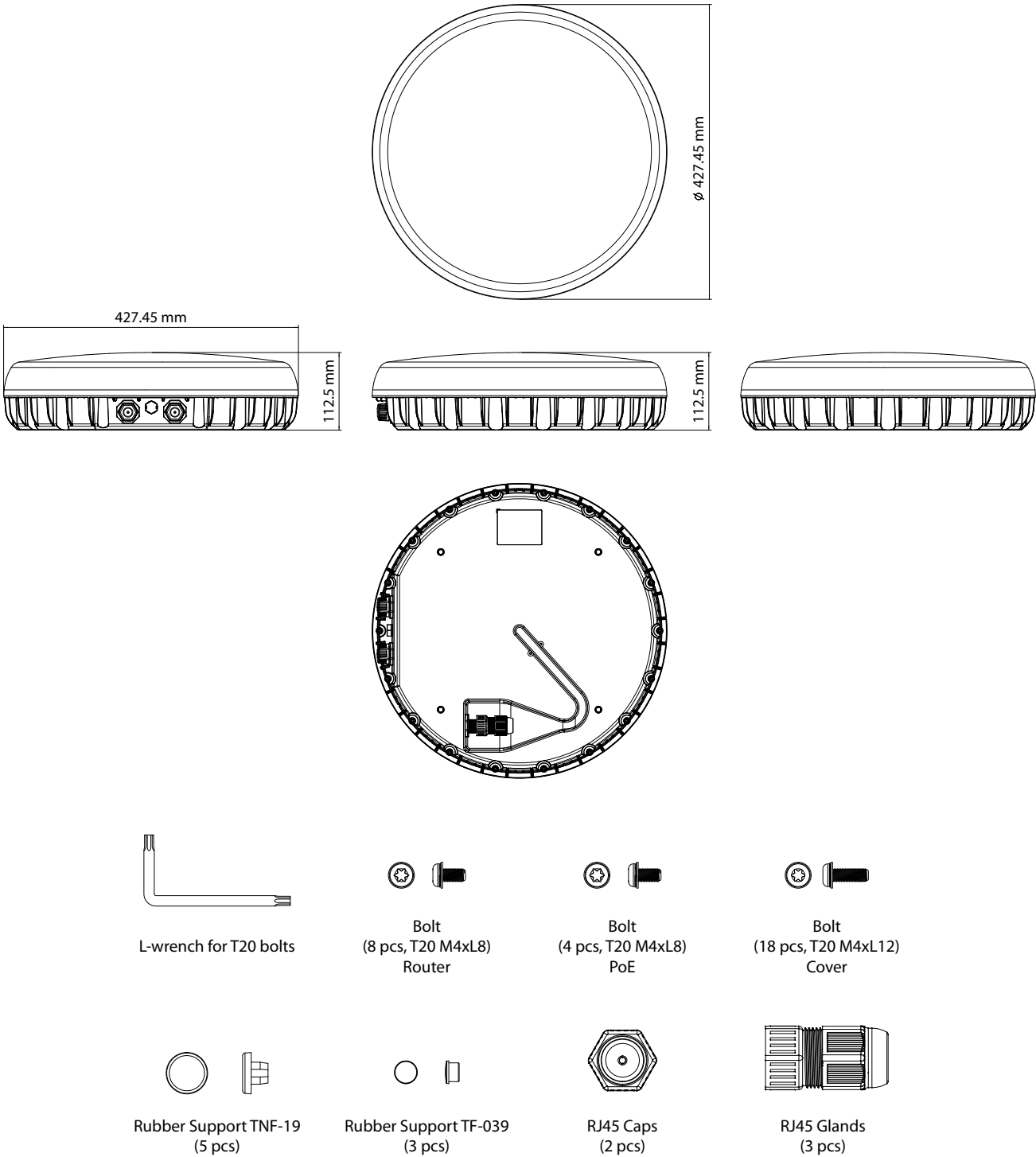
Vertical Pole



Horizontal Pole

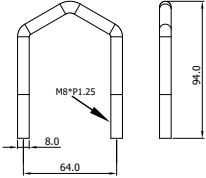
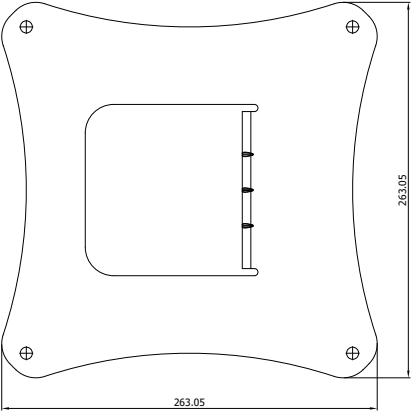
Packing List Information

Antenna

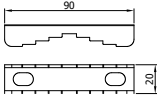


Packing List Information

L-Mount Mount Set



V-bolt
(2 pcs)



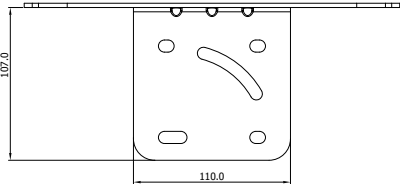
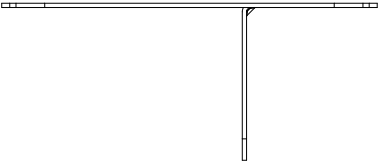
Bracket
(2 pcs)



Hex Socket
(4pcs, H6, M8xL20)

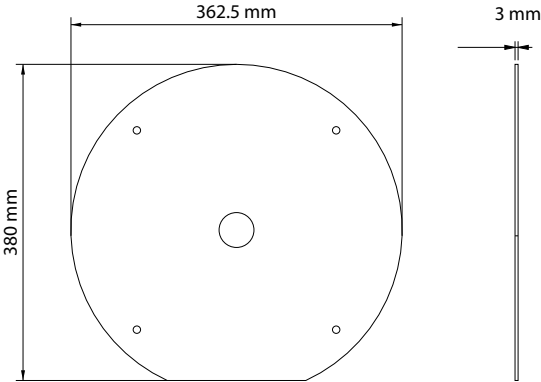


V-bolt Nut
(4 pcs, M8)

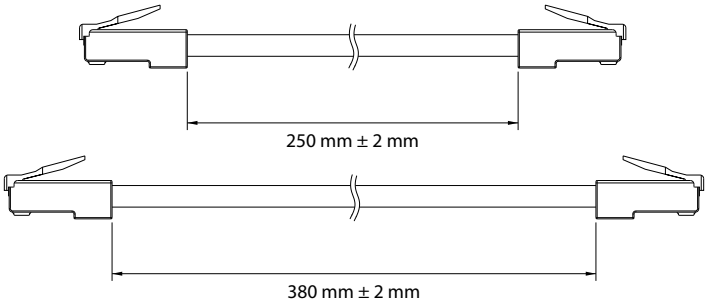


L-Mount

Adhesive Pad



Cables



Ethernet Cable