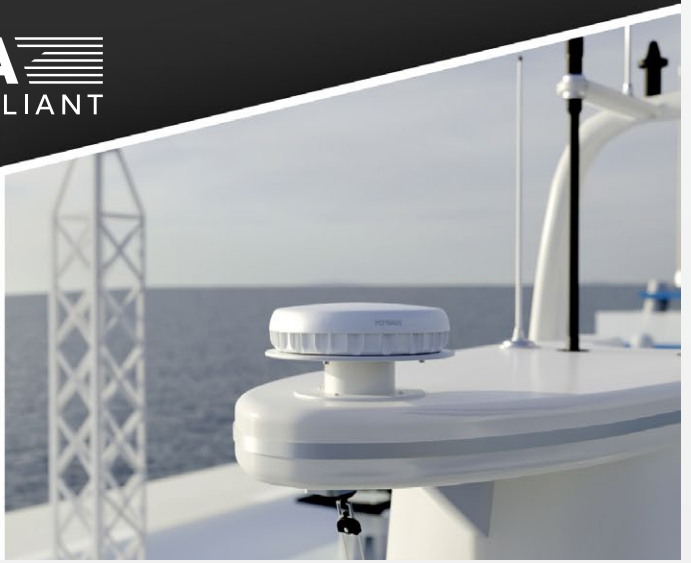


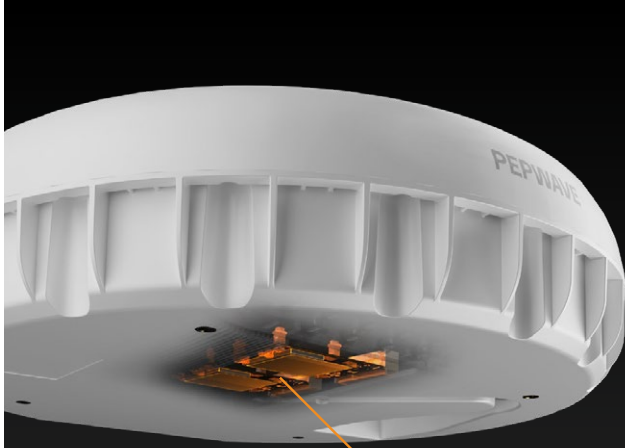


# Antenna **MAX Duo**

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



**TAA**   
COMPLIANT



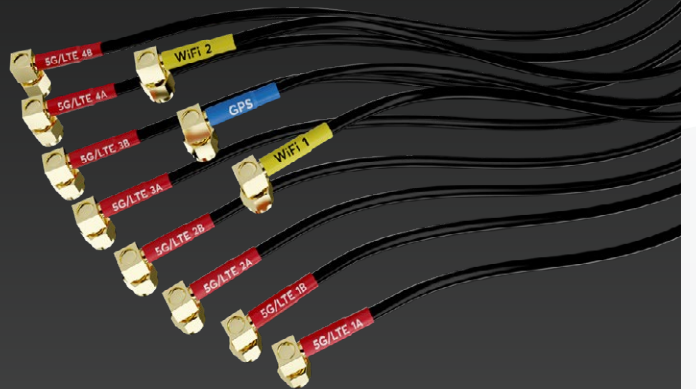
2x

5G/LTE  
Modem

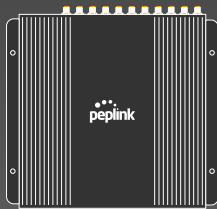
## MAXed Out Synergy

Two Modems.  
One Setup.  
Unlimited Possibilities.

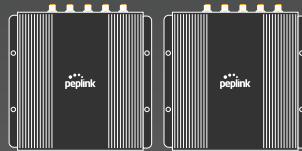
Featuring 8x 5G/LTE, 2x Wi-Fi, and GPS antenna elements, the Antenna MAX Duo delivers reliable connectivity using two modems housed in a single, ruggedised enclosure. The integrated design removes the need for external RF cabling, reducing signal loss and setup complexity.



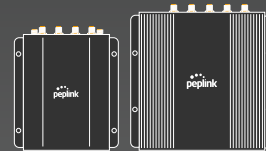
### Supported dual-modem Peplink router setups include:



[ BR2 Pro ]



[ 2x BR1 Pro 5G ]\*

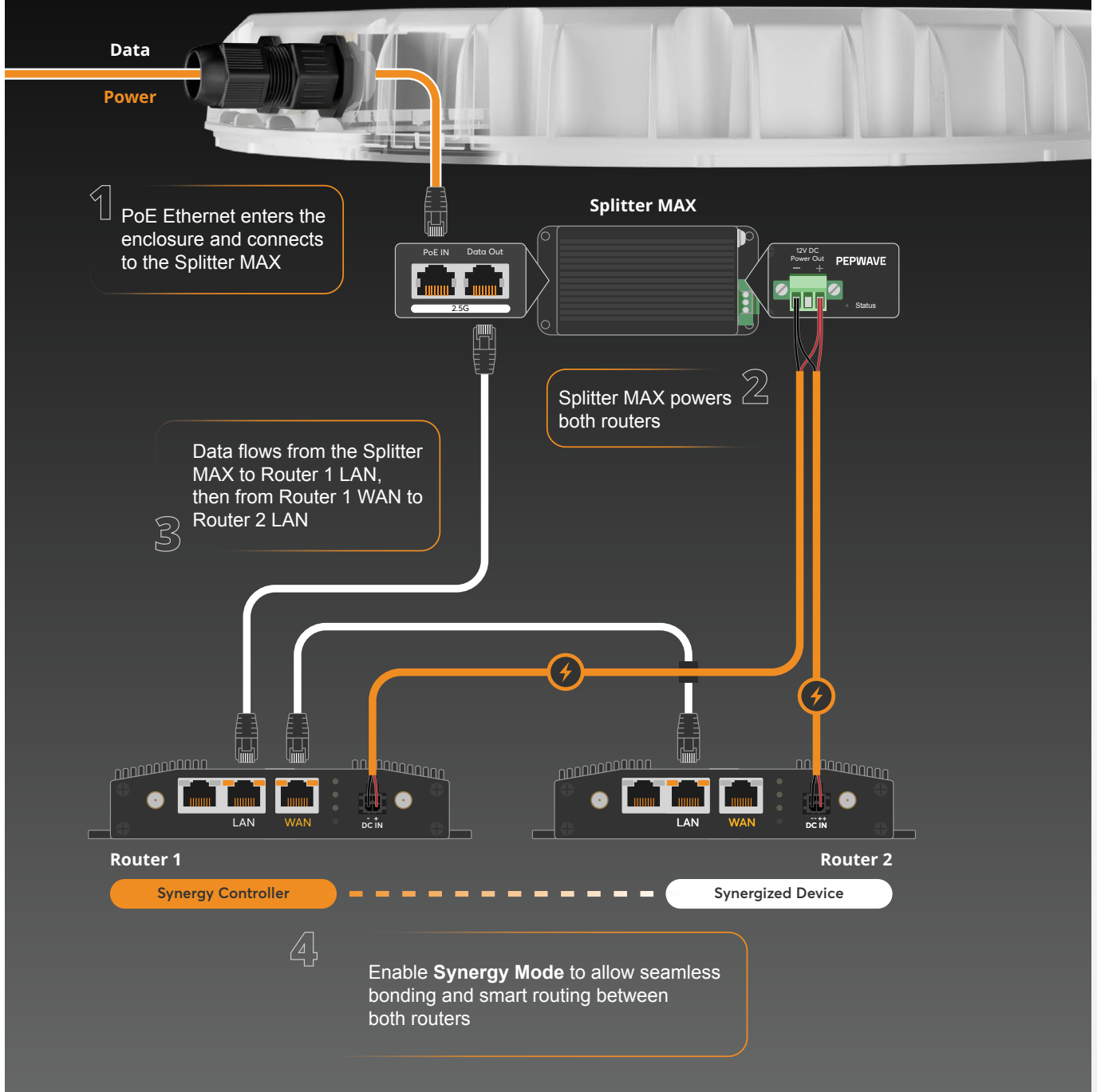


[ BR1 Mini 5G + BR1 Pro 5G ]\*

\*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:





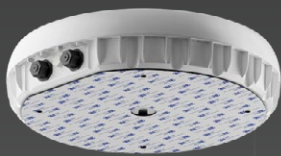
## MAXed Out Ruggedness

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:

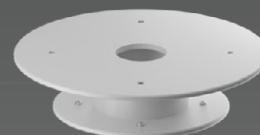


Surface Mount



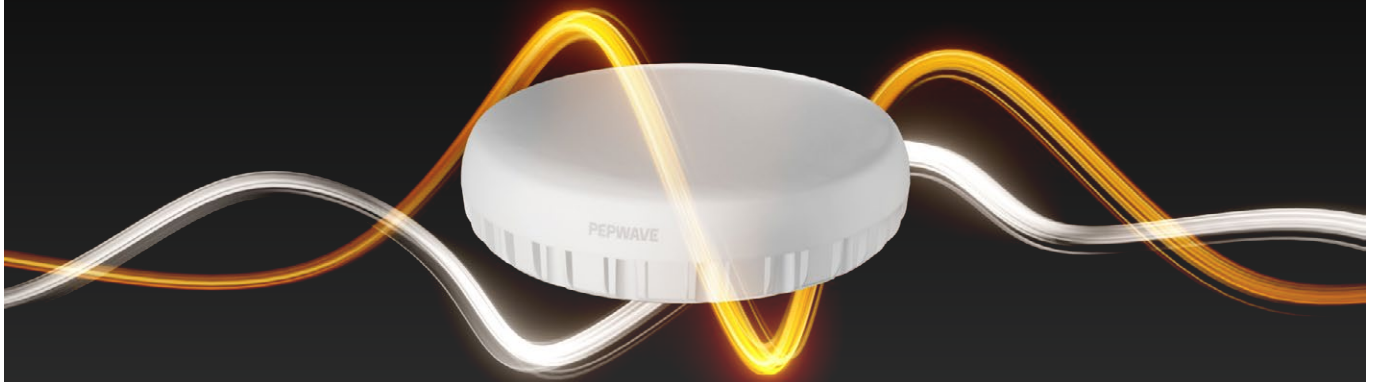
Pole Mount  
(vertical or horizontal)

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

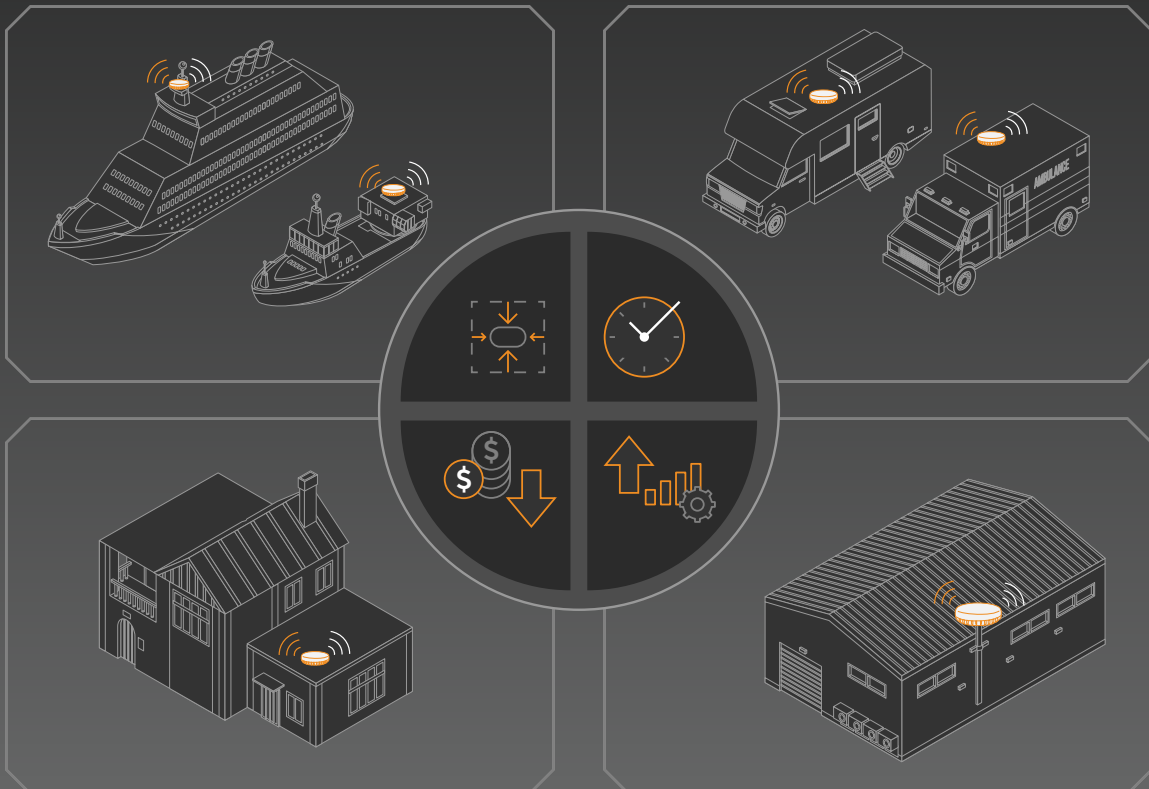


## MAXed Out Savings

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-maximising** solution for maritime, mobile, enterprise, and remote deployments.





## Specifications

### Cellular

- **Antenna Elements:**  
8 elements
- **Peak Gain & Frequencies:**  
5.6dBi: 617-960MHz  
6.5dBi: 1410-2700MHz  
8.1dBi: 3400-4400MHz  
7.4dBi: 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

### 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

### 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

### Mounting

- **Supported Types:**  
Surface, Pole

### Mechanical

- **Product Dimensions:**  
4.82" / 122.5 mm - Height  
16.83" / 427.5 mm - Diameter
- **Packaged Dimensions:**  
21.97" x 25.51" x 16.46" /  
558 x 648 x 418 mm
- **Enclosure Material:**  
UV stable PC

### Environmental, Compliance

- **IP Rating:**  
IP67
- **Operating Temperature:**  
-40° - 176°F / -40° - 80°C
- **Storage Temperature:**  
-40° - 176°F / -40° - 80°C

- **Compliance:**  
ROHS, REACH, WEEE
- **Enclosure Flammability:**  
UL 94 V-0 (1.47 mm)
- **UV resistance:**  
UL 746C (F1 long-term UV exposure)
- **Salt Spray:**  
MIL-STD 810F/ASTM 8117

### Package Contents

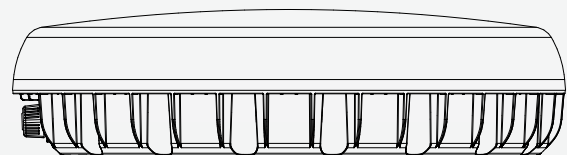
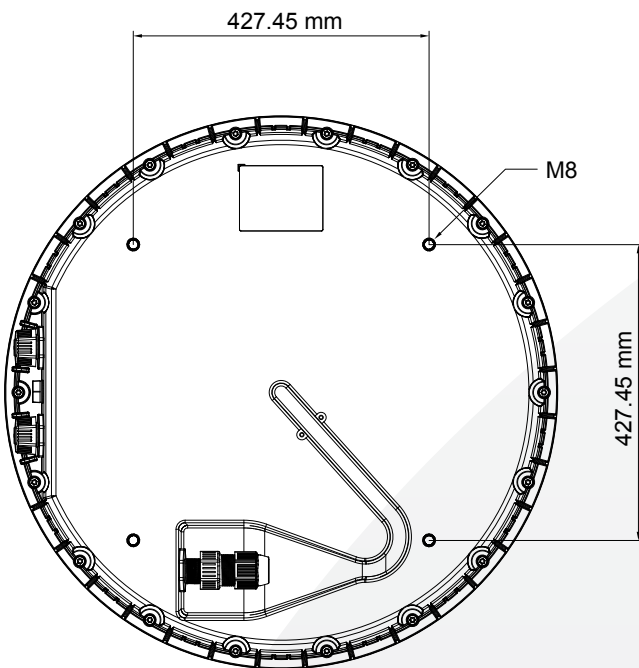
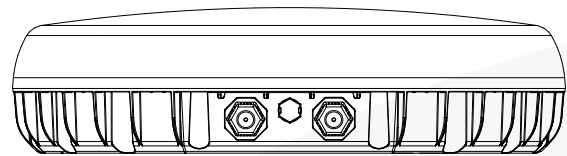
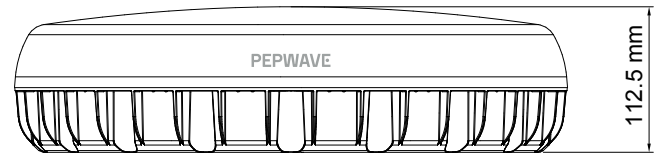
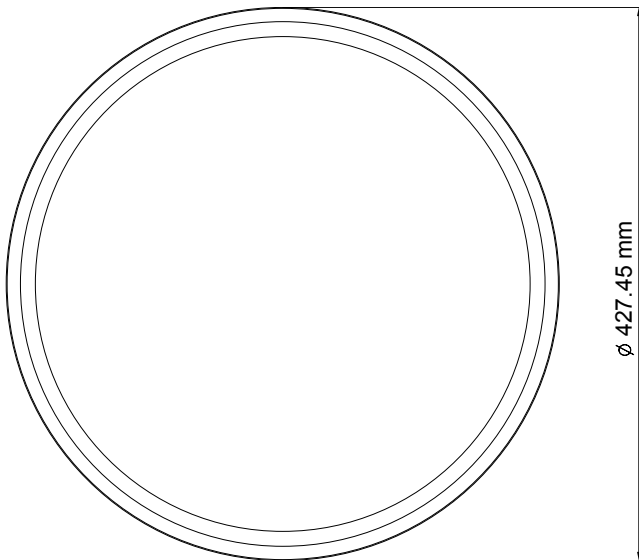
- **Package Contents:**  
Antenna MAX Duo  
L-Mount Set  
Router fixation screws  
5pcs Rubber Support TNF-19  
3pcs Rubber Support TF-039  
3pcs RJ45 glands  
2pcs RJ45 caps  
1pcs Double sided 3M adhesive pad  
1pcs Ethernet cable (9.84" / 250mm)  
1pcs Ethernet cable (14.96" / 380mm)



## 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

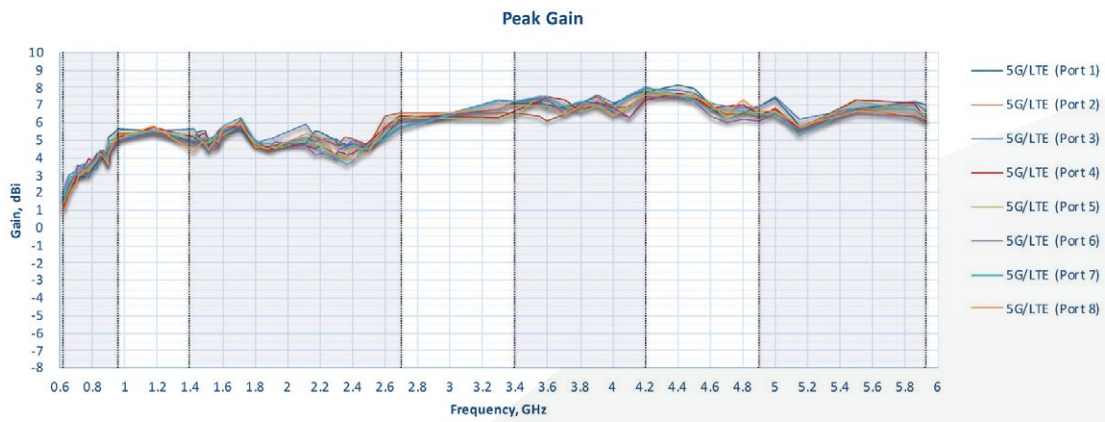


## Cellular Antenna Performance

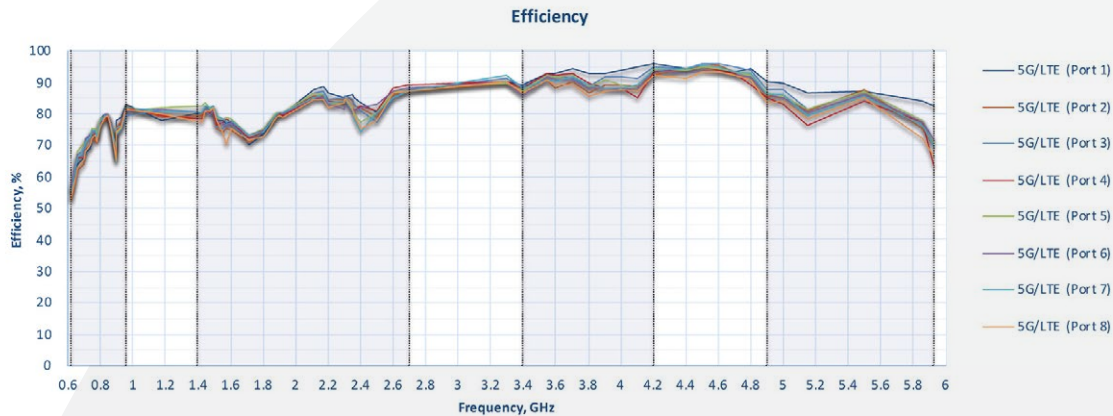
### Cellular Antenna VSWR



### Cellular Antenna Gain



### Cellular Antenna Efficiency

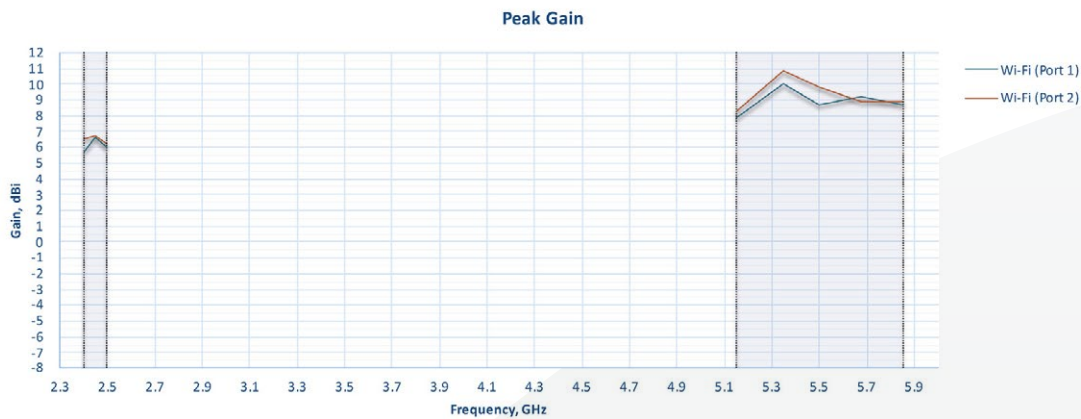


## Wi-Fi Antenna Performance

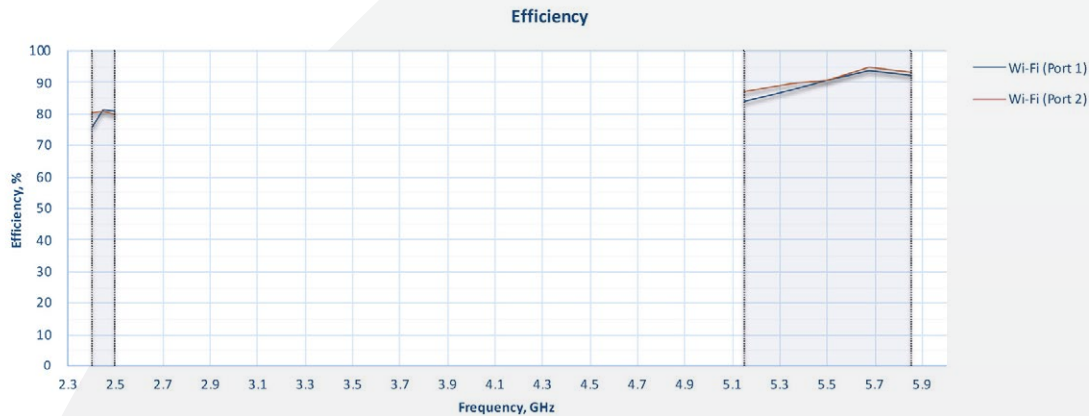
### Wi-Fi Antenna VSWR



### Wi-Fi Antenna Gain



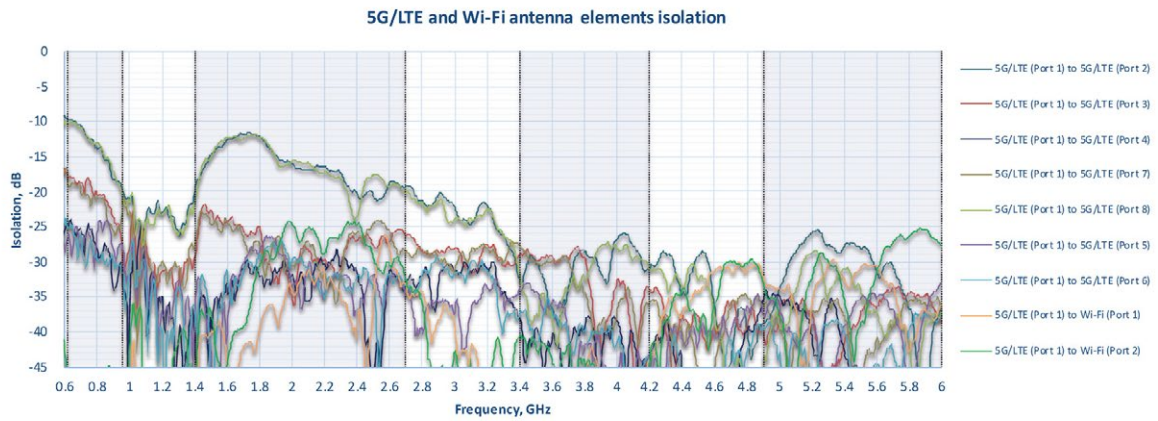
### Wi-Fi Antenna Efficiency





## Cellular & Wi-Fi Antenna Performance

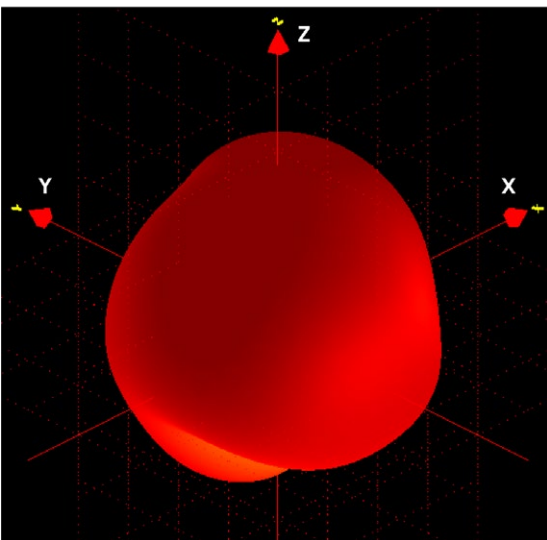
### Cellular & Wi-Fi Antenna Isolation



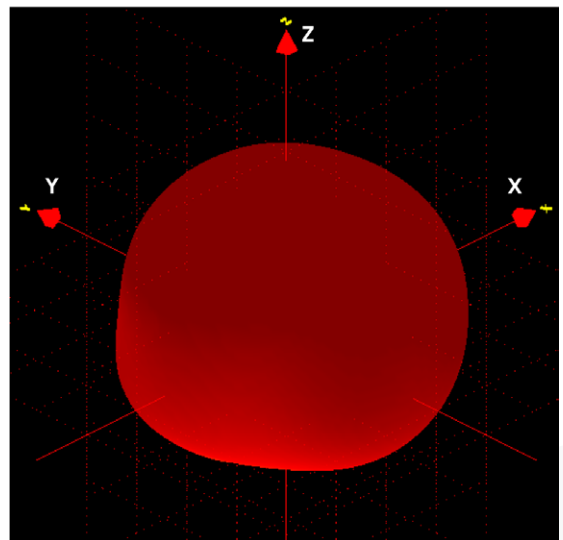
## Cellular & Wi-Fi Antenna Performance

### Typical Radiation Pattern

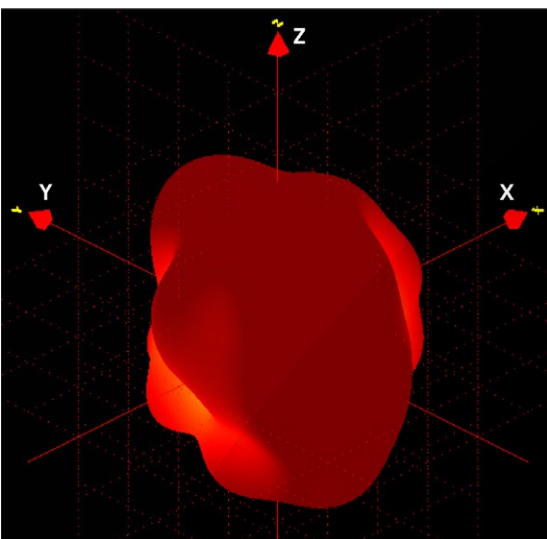
617 MHz



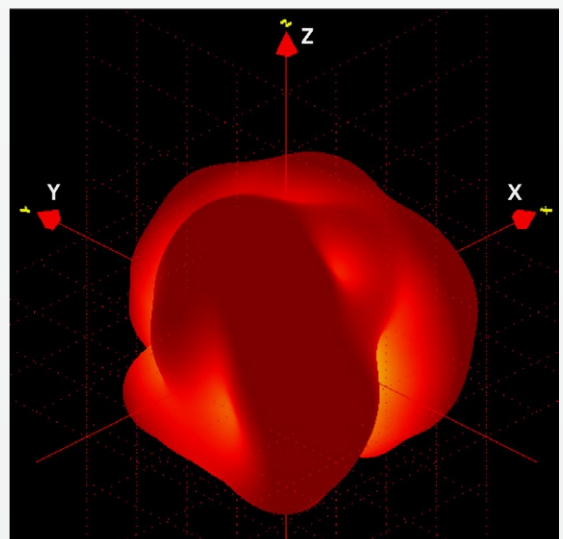
798 MHz



1496 MHz



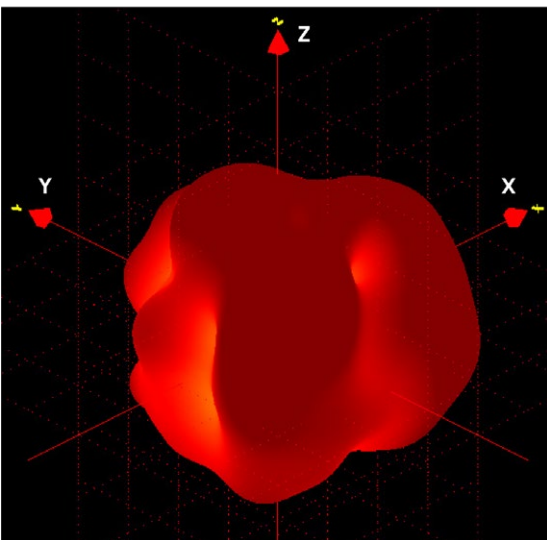
1805 MHz



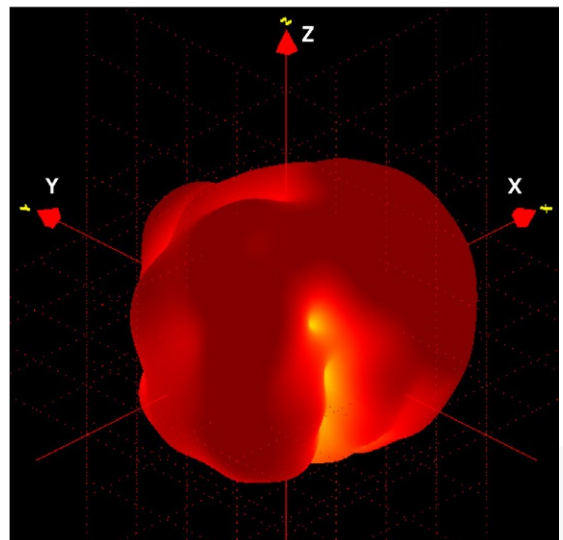
## Cellular & Wi-Fi Antenna Performance

### Typical Radiation Pattern

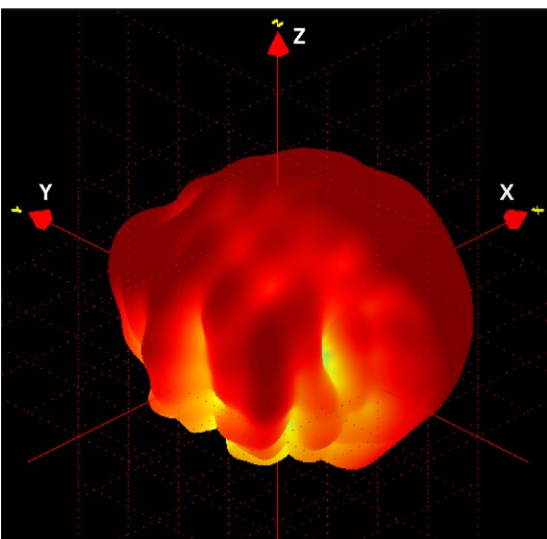
2110 MHz



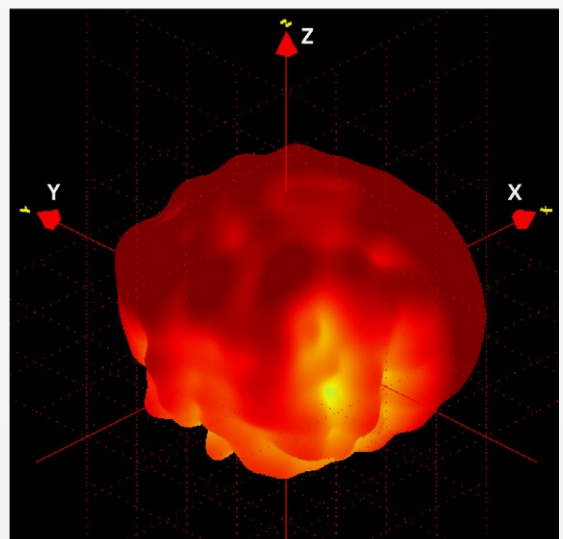
2400 MHz



3550 MHz

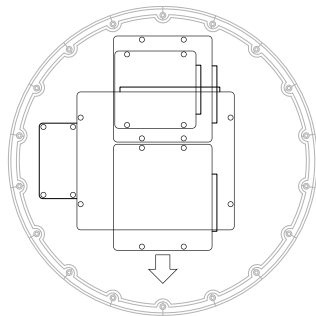


3800 MHz



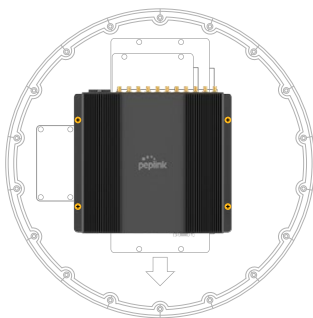
## Installation Recommendation

### Position Router

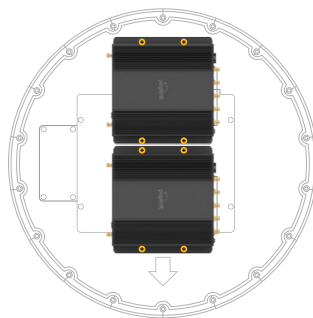


Make sure you align the router with the placement mark on the silkscreen.

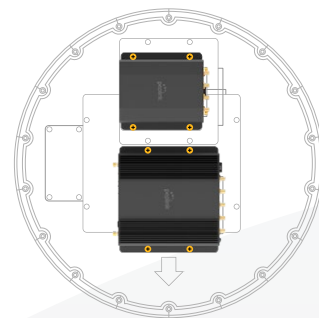
**Silkscreen**



**BR2 Pro**

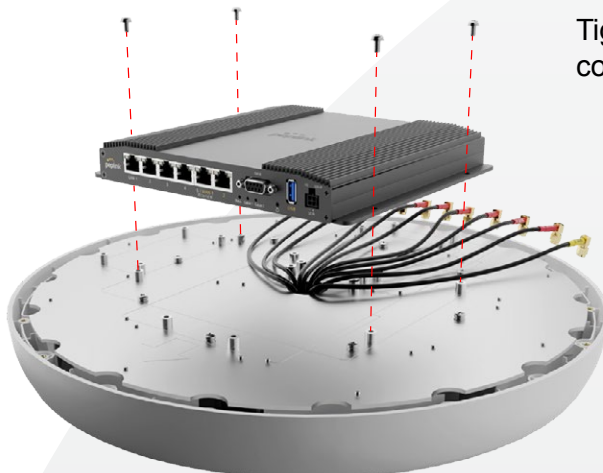


**BR1 Pro 5G + BR1 Pro 5G**

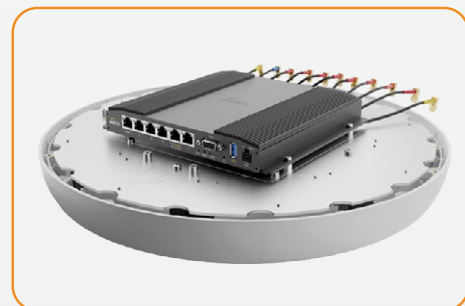


**BR1 Pro 5G + BR1 Mini 5G**

### Install Router

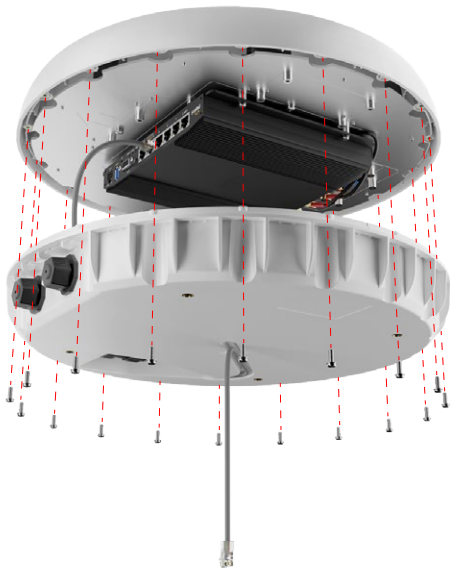


Tighten the screws securely into the corresponding router's mounting holes.



## Installation Recommendation

### 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

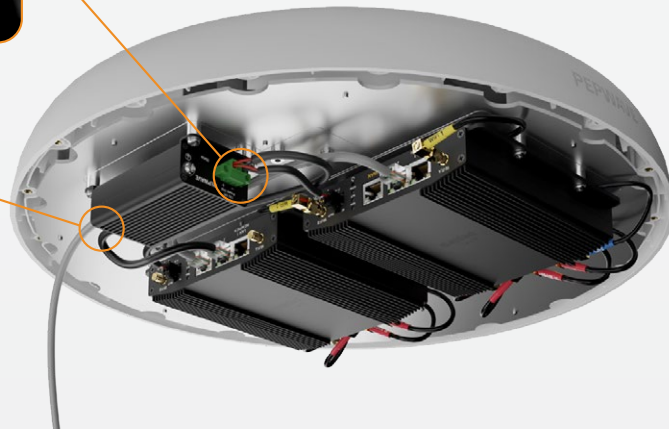


When using multiple routers (e.g. two BR1 Pro 5G), a PoE Splitter (e.g. Splitter MAX) should be used to provide power to each device.



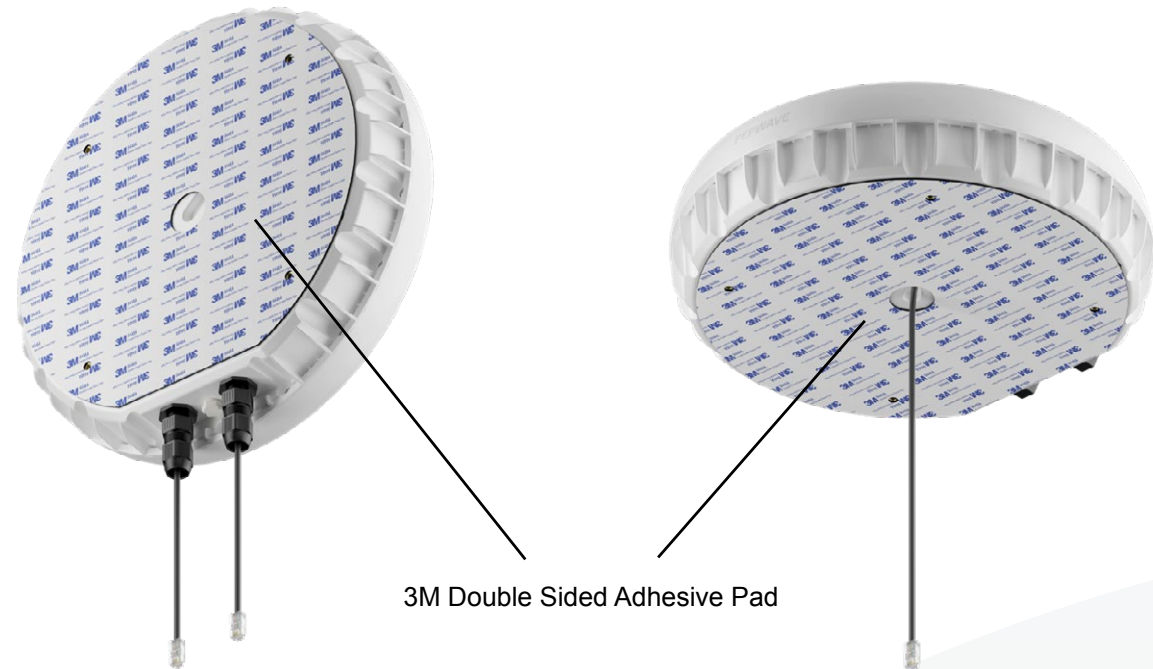
Data Output

PoE Input

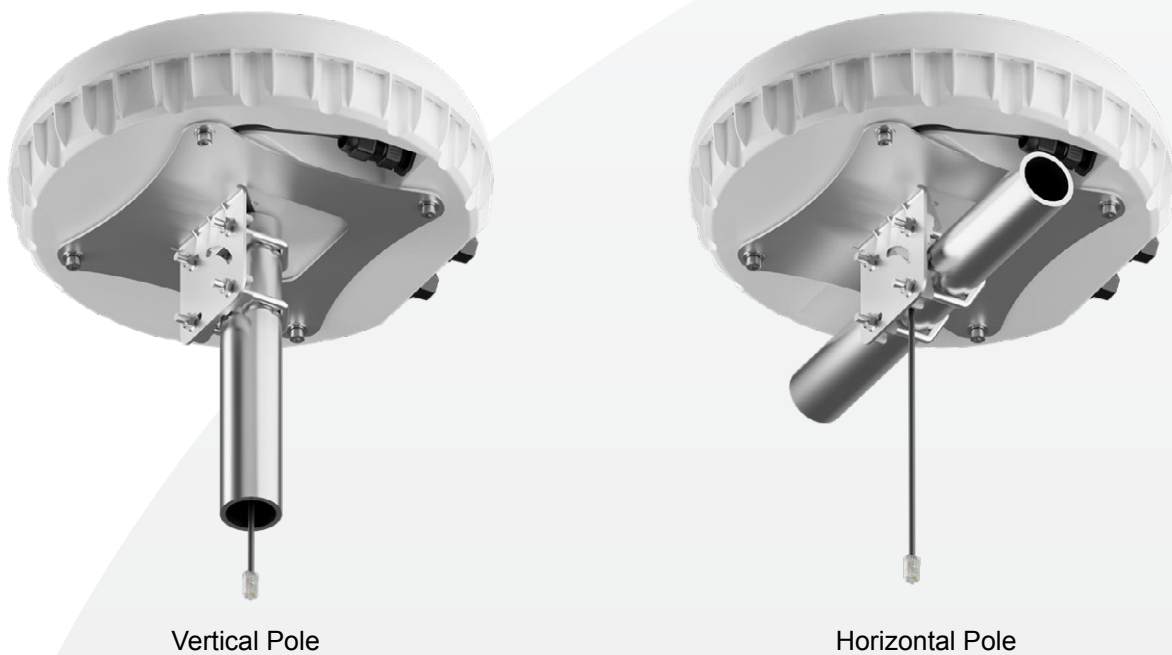


## Installation Recommendation

### Surface Mount

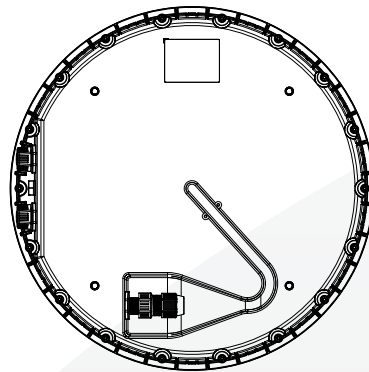
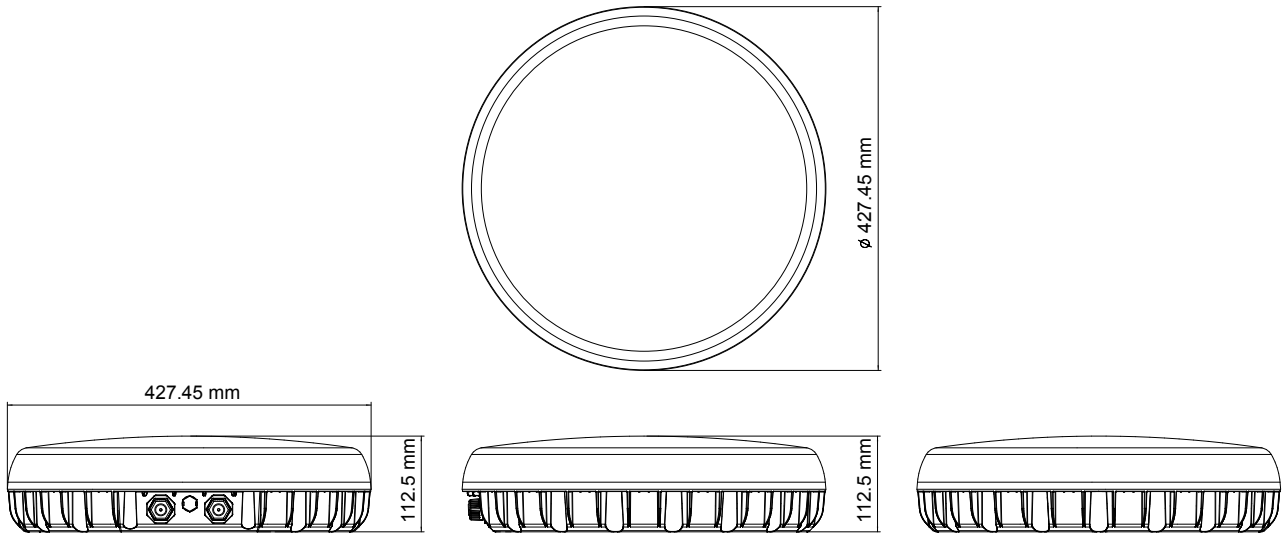


### Pole Mount



## Packing List Information

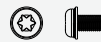
### Antenna



L-wrench for T20 bolts



Bolt  
(8 pcs, T20 M4xL8)  
Router



Bolt  
(4 pcs, T20 M4xL8)  
PoE



Bolt  
(18 pcs, T20 M4xL12)  
Cover



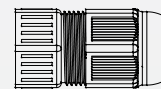
Rubber Support TNF-19  
(5 pcs)



Rubber Support TF-039  
(3 pcs)



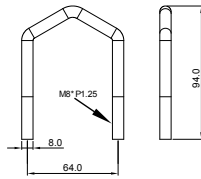
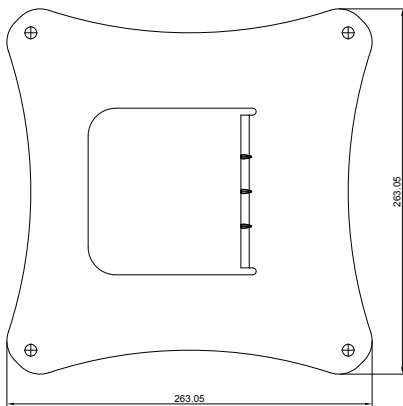
RJ45 Caps  
(2 pcs)



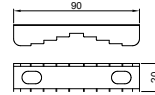
RJ45 Glands  
(3 pcs)

## Packing List Information

### L-Mount Mount Set



V-bolt  
(2 pcs)



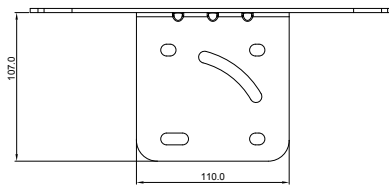
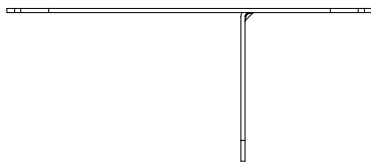
Bracket  
(2 pcs)



Hex Socket  
(4pcs, H6, M8xL20)

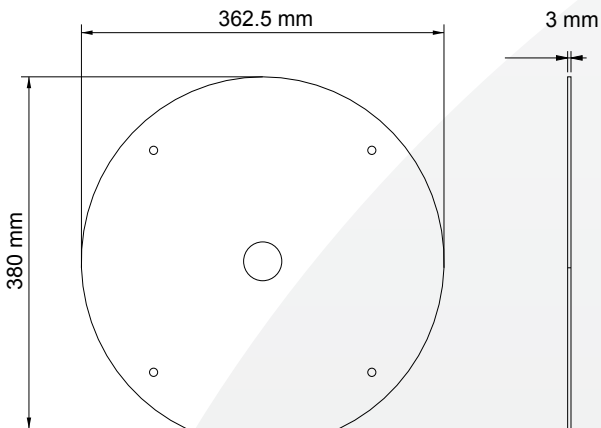


V-bolt Nut  
(4 pcs, M8)

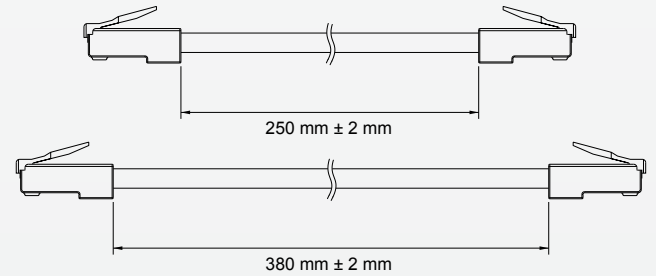


L-Mount

### Adhesive Pad



### Cables



Ethernet Cable