

PEPWAVE



peplink x STARLINK

# Antenna MAX S HW3

Rapid Deployment.  
All-in-One. 5G + Starlink.

Integrated Antenna Enclosure for Peplink and Starlink

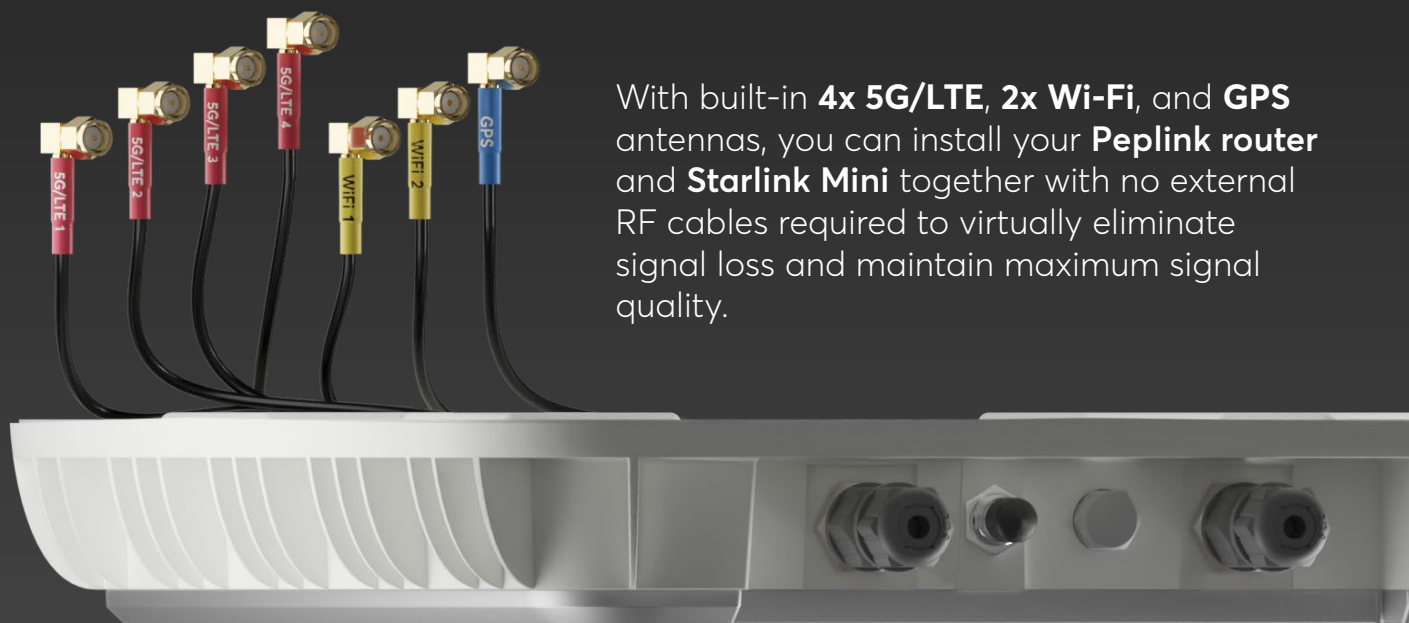
**TAA**  
COMPLIANT

## Integration to the **MAX**

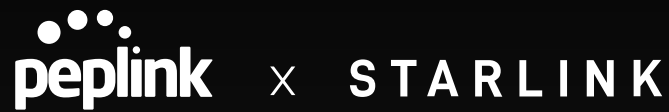
One enclosure. One install. All performance.



The **Antenna MAX S** takes hybrid connectivity to the MAX by combining the power of Starlink and cellular in a **single, integrated enclosure**.



With built-in **4x 5G/LTE**, **2x Wi-Fi**, and **GPS** antennas, you can install your **Peplink router** and **Starlink Mini** together with no external RF cables required to virtually eliminate signal loss and maintain maximum signal quality.



Use **Peplink's SpeedFusion** to seamlessly bond or failover between Starlink and 5G, ensuring continuous, high-quality connectivity even in areas with physical obstructions.



## Durability to the **MAX**

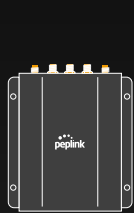
The Antenna MAX S is engineered for outdoor longevity, built with UV- and salt-resistant plastics, fitted with a metal base for heat dissipation, designed to withstand high wind loads for fixed or mobile applications.



## Convenience to the MAX

Designed for flexible deployment, the Antenna MAX S includes extra room for a user-installed internal power module powered via DC or PoE input.

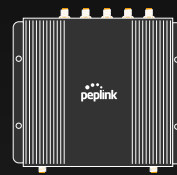
Use the top cover's watertight clasp system to conveniently secure the Peplink router of your choice:



BR1 Mini Series <sup>1</sup>



Transit Duo Pro



BR1 Pro Series <sup>2</sup>

<sup>1</sup> BR1 Mini series: BR1 Mini, BR1 Mini Core, BR1 Mini 5G, BR1 Mini M2M.

<sup>2</sup> BR1 Pro series: BR1 Pro 5G, BR1 Pro CAT-20.

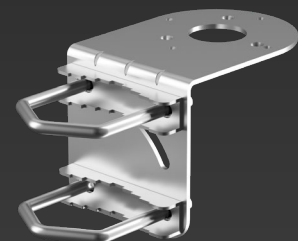
Mount it your way with a variety of installation options ideal for vehicles, rooftops, poles, or even custom rack systems.



Surface Mount



Deck Mount



Pole Mount



Magnetic Mount

Note: The deck and magnetic mount kits are **NOT included** in the package.

## Value to the **MAX**

Designed for performance and priced for practicality, the Antenna MAX S delivers an all-in-one Starlink and cellular solution at a price that makes sense for businesses, fleets, and integrators alike.

Whether you're operating from a remote location, working in an RV, or maintaining mission-critical connections on the move, it saves time, space, and cost - without compromising performance.





## Specifications

### Cellular

|                                    |  |
|------------------------------------|--|
| <b>Antenna Elements</b>            | 4 elements   |
| <b>Peak Gain &amp; Frequencies</b> | 5.7dBi: 617-960MHz<br>6.8dBi: 1410-2700MHz<br>8.9dBi: 3300-4400MHz<br>7.3dBi: 5000-6000MHz |
| <b>VSWR</b>                        | < 2.5 over 95% of the band   |
| <b>Feed Power Handling</b>         | 10W  |
| <b>Input Impedance</b>             | 50 Ω   |
| <b>Polarisation</b>                | Linear   |
| <b>Connectors</b>                  | Right-angle SMA male   |

### Wi-Fi

|                                    |  |
|------------------------------------|--|
| <b>Antenna Elements</b>            | 2 elements                                   |
| <b>Peak Gain &amp; Frequencies</b> | 6.3dBi: 2400-2500MHz<br>7.4dBi: 5000-6000MHz |
| <b>VSWR</b>                        | < 3.0  |
| <b>Feed Power Handling</b>         | 10W  |
| <b>Input Impedance</b>             | 50 Ω   |
| <b>Polarisation</b>                | Linear                                       |
| <b>Connectors</b>                  | Right-angle RP-SMA male                      |

### GPS

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

## Specifications

### Mounting

**Supported Types** Surface, Pole, Magnetic, Vehicle roof rack, or Custom mounts

### Package Contents

**Package Contents**

- Antenna MAX S
- L-mount set
- Power supply/splitter mounting set
- Router fixation screws
- 2pcs M25 cable glands
- 1pc M25 hole plug
- 2pcs RJ45 glands
- 2pcs RJ45 caps
- 2pcs Hole plug
- 1pc DC cable-connector
- 1pc Starlink power cable (35.4" / 900mm)
- 1pc Starlink Ethernet cable (35.4" / 900mm)
- 1pc Double-sided 3M adhesive pad
- 1pc Ethernet cable (7.87" / 200mm)
- 1pc DC cable (3.93" / 100mm)

### Mechanical

**Product Dimensions** 17.6" / 448mm - Length  
14.5" / 368mm - Width  
5.3" / 135mm - Height

**Packaged Dimensions** 585 x 456 x 185mm / 23.03" x 17.95" x 7.28"

**Enclosure Material** Bottom plate - Aluminium  
Other parts - 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 (1.47mm)

**UV resistance** UL 746C (F1 long-term UV exposure)

**Salt Spray** ASTM B117

## Ordering Information

### Product Code

ANT-MAX-S

### Description

Enclosure with integrated 4x 5G/LTE, 2x Wi-Fi, GPS antennas for Peplink routers and Starlink Mini bundle solution.

## Featured Add-on

### Product Code

ACW-651

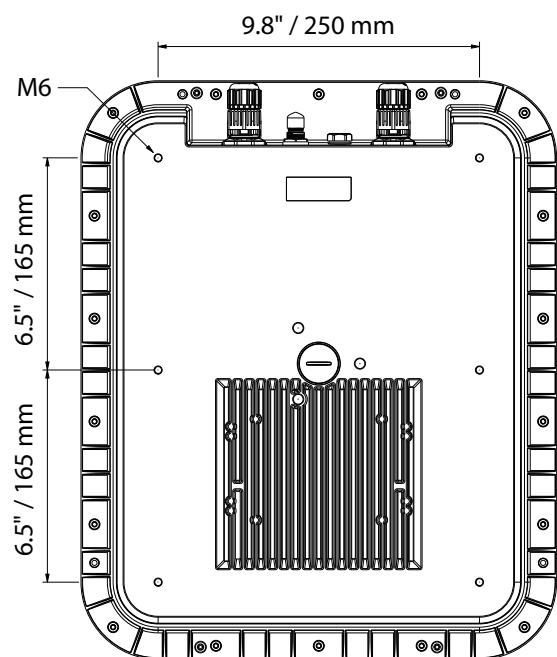
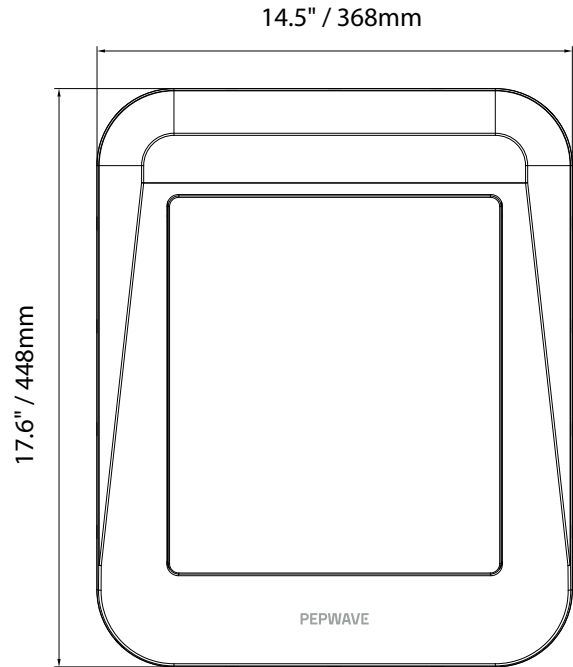
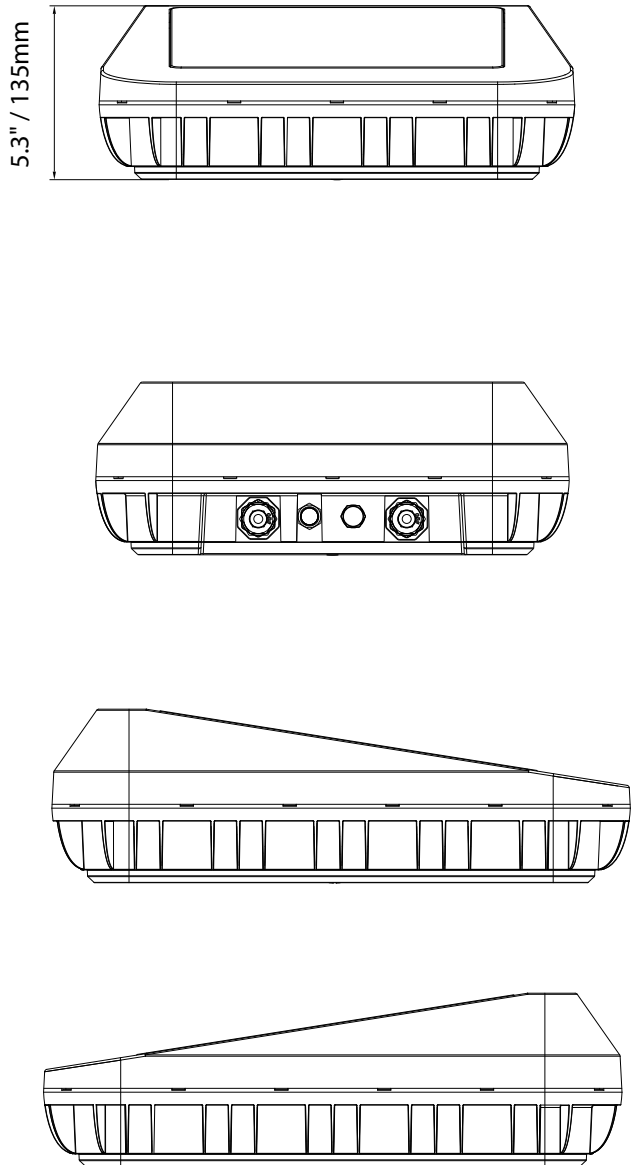
### Description

1" 14 TPI female to Mobility thread for deck mount

ACW-653A

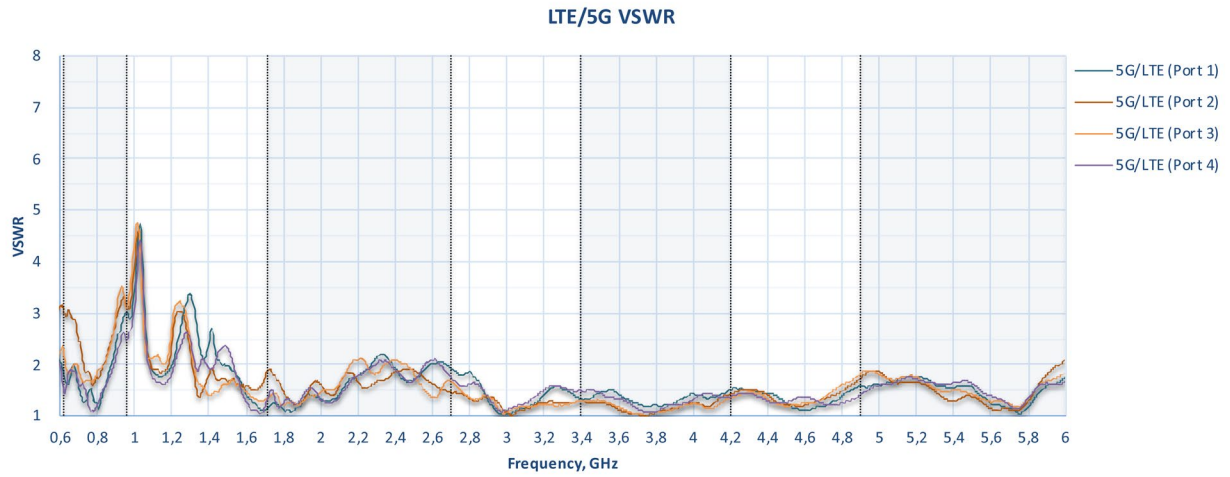
1 1/4" 11 TPI male adapter for deck mount

## Technical Drawing

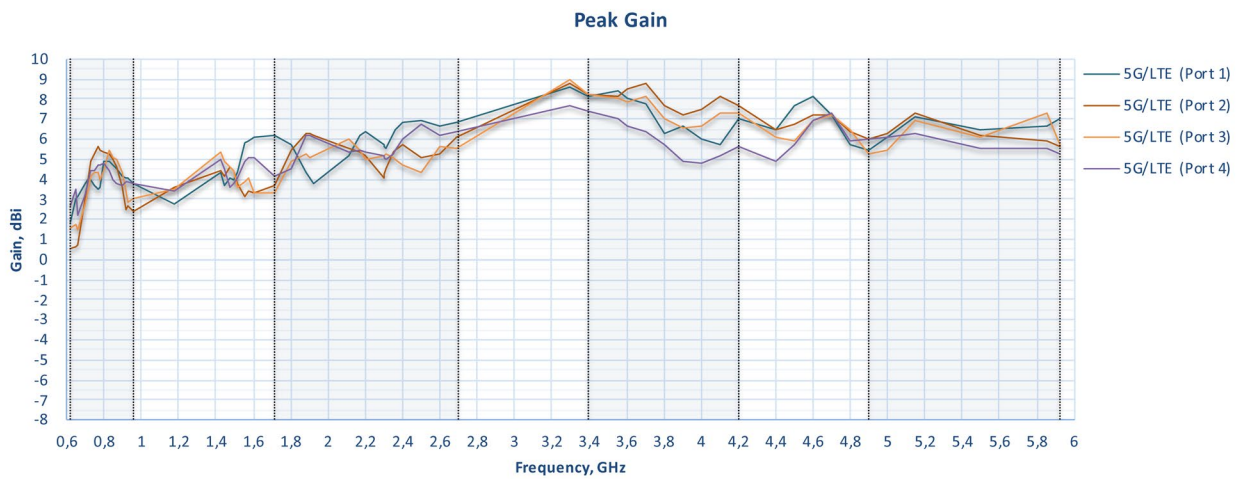


## Cellular Antenna Performance

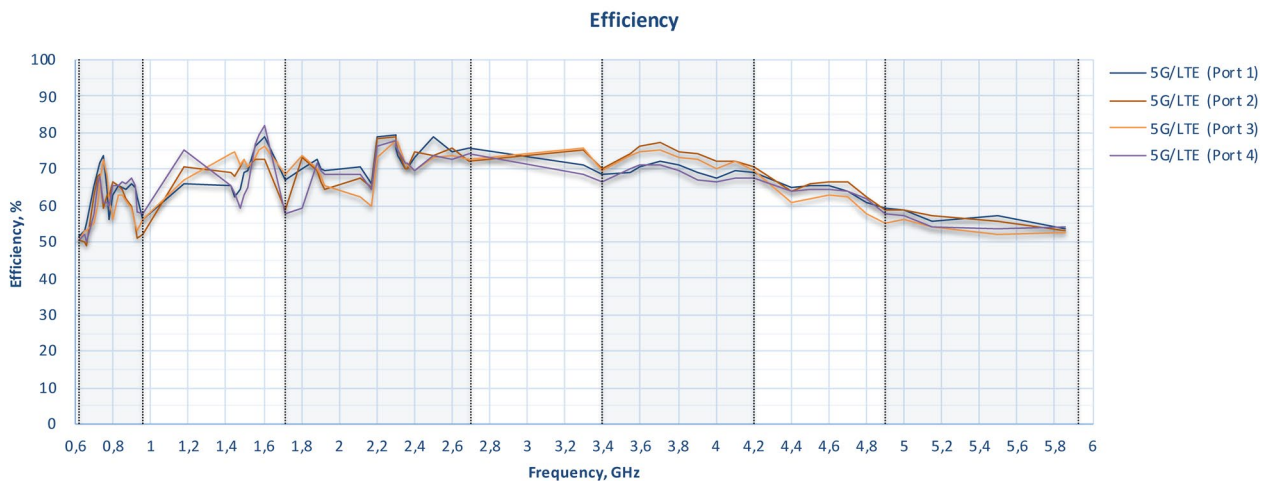
### Cellular Antenna VSWR



### Cellular Antenna Gain

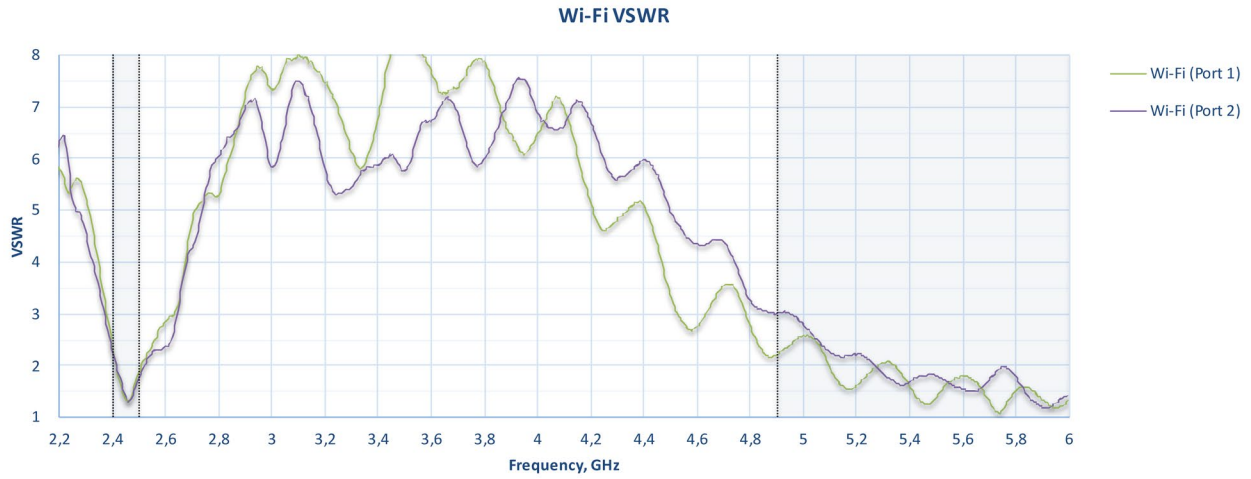


### Cellular Antenna Efficiency

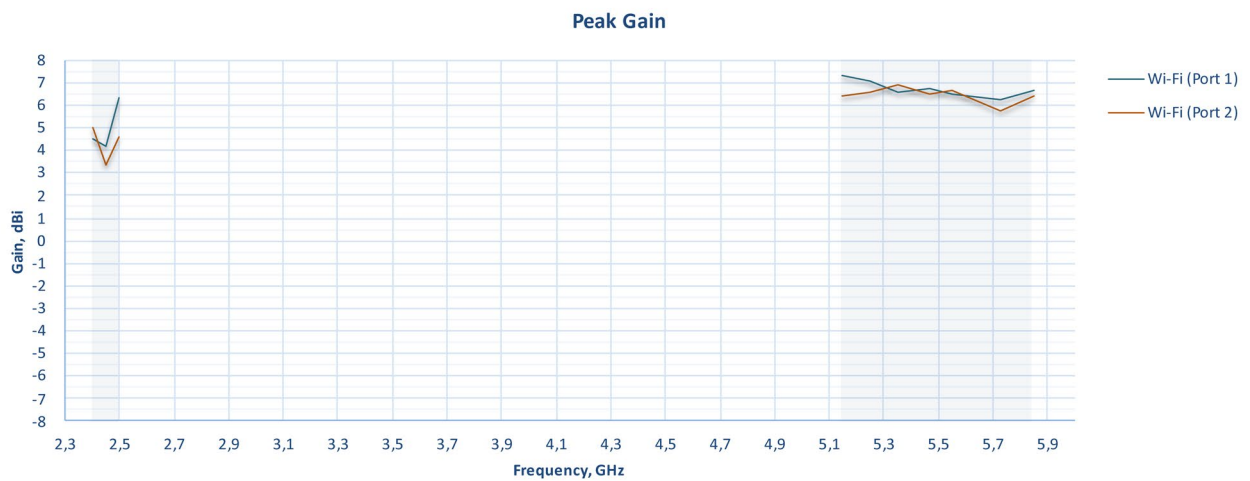


## Wi-Fi Antenna Performance

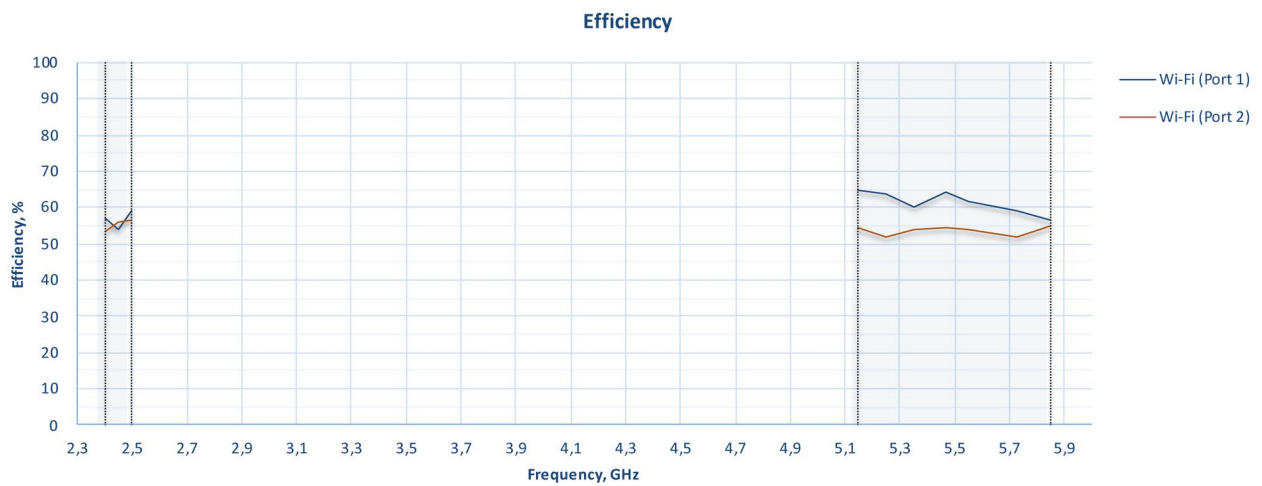
### Wi-Fi Antenna VSWR



### Wi-Fi Antenna Gain

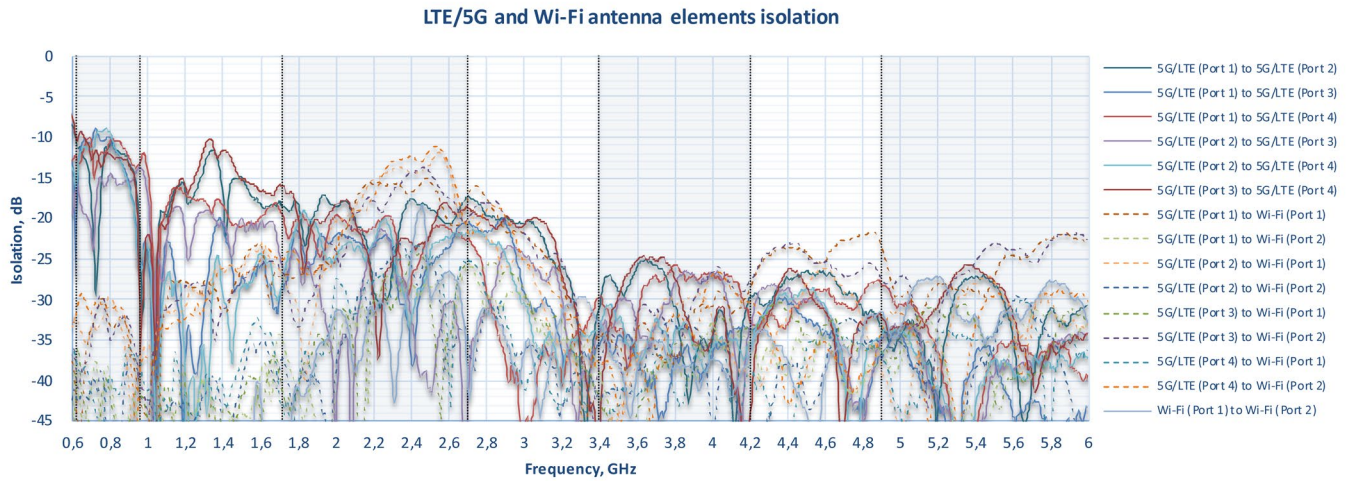


### Wi-Fi Antenna Efficiency



## Cellular & Wi-Fi Antenna Performance

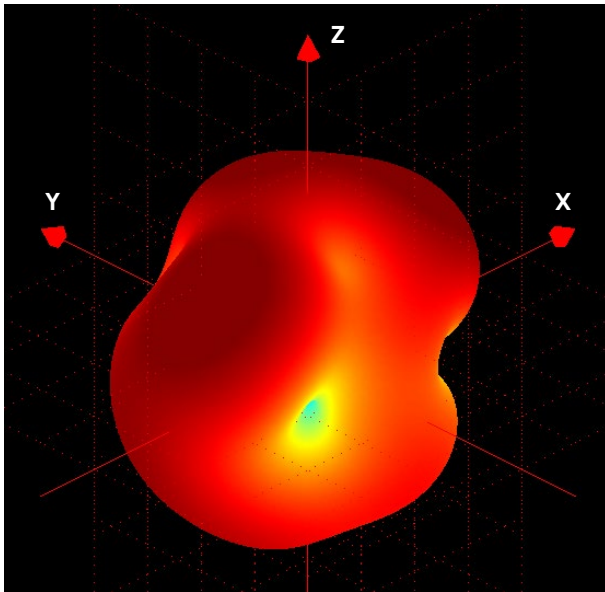
### Cellular & Wi-Fi Antenna Isolation



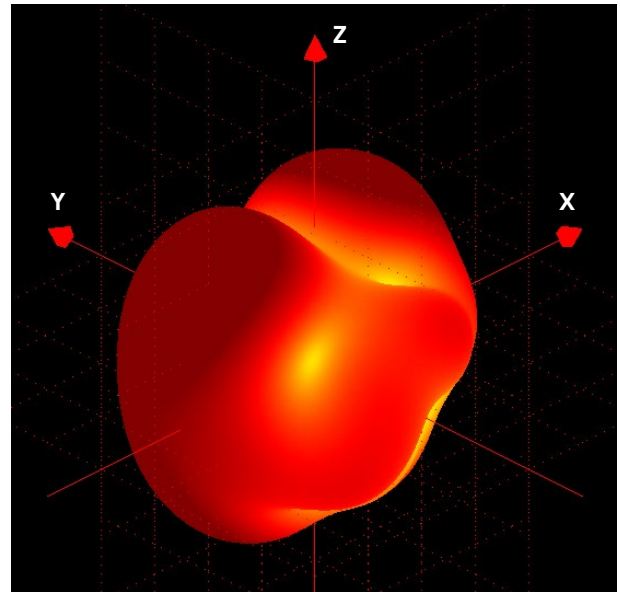
## Cellular & Wi-Fi Antenna Performance

Typical Radiation Pattern

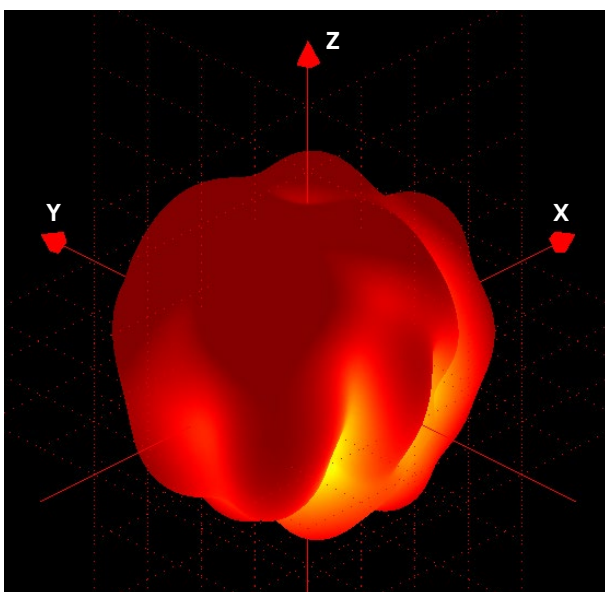
617 MHz



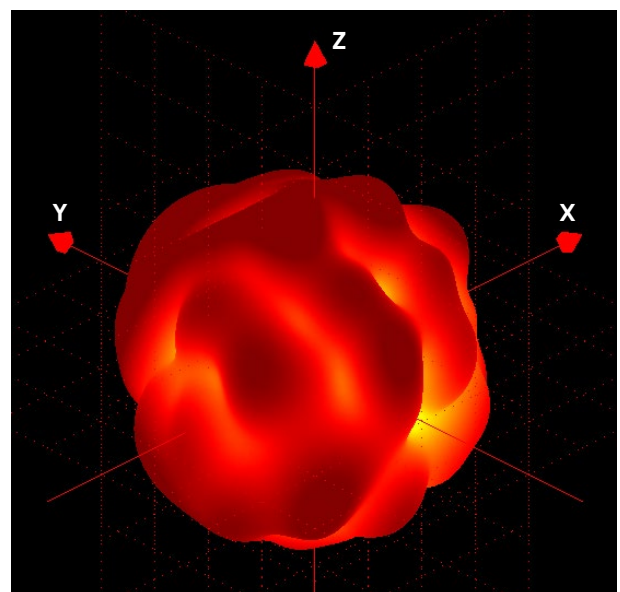
798 MHz



1496 MHz



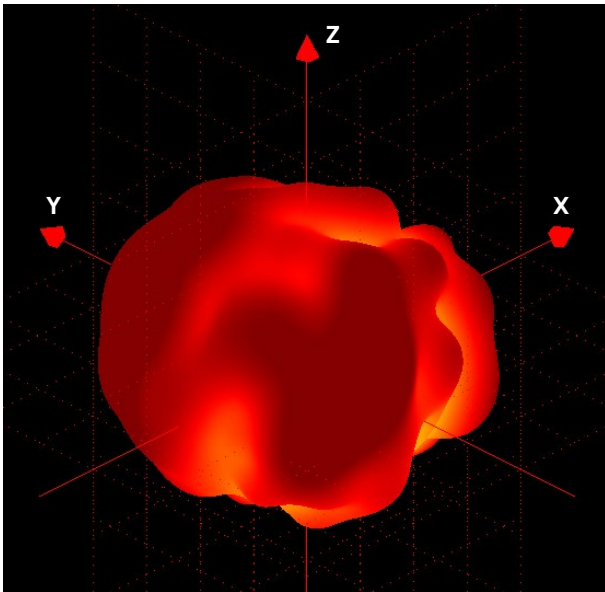
1805 MHz



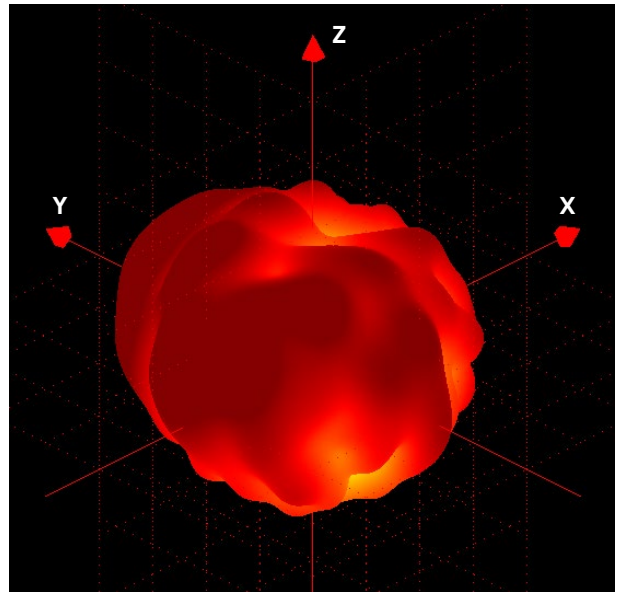
## Cellular & Wi-Fi Antenna Performance

Typical Radiation Pattern

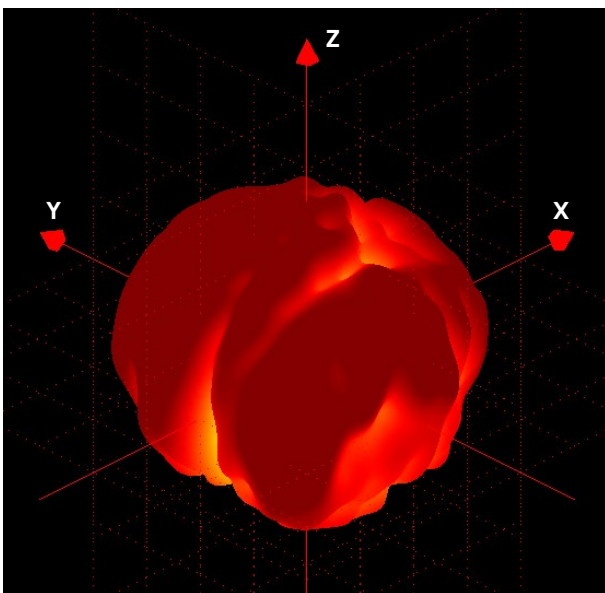
2110 MHz



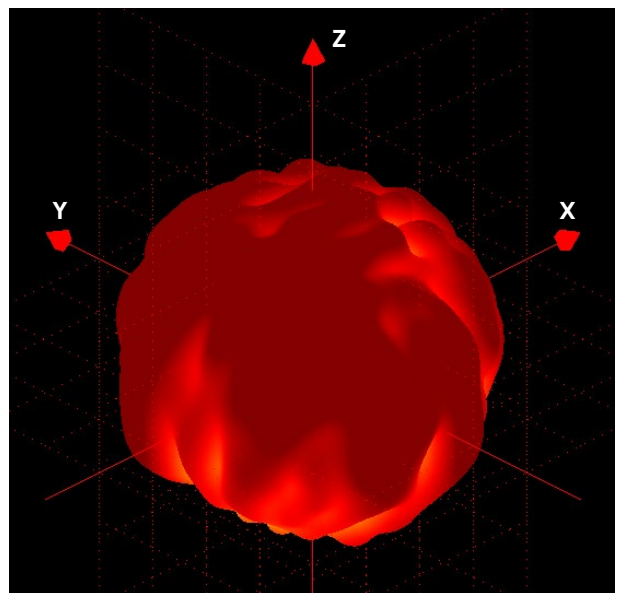
2400 MHz



3550 MHz

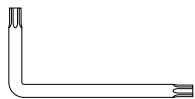
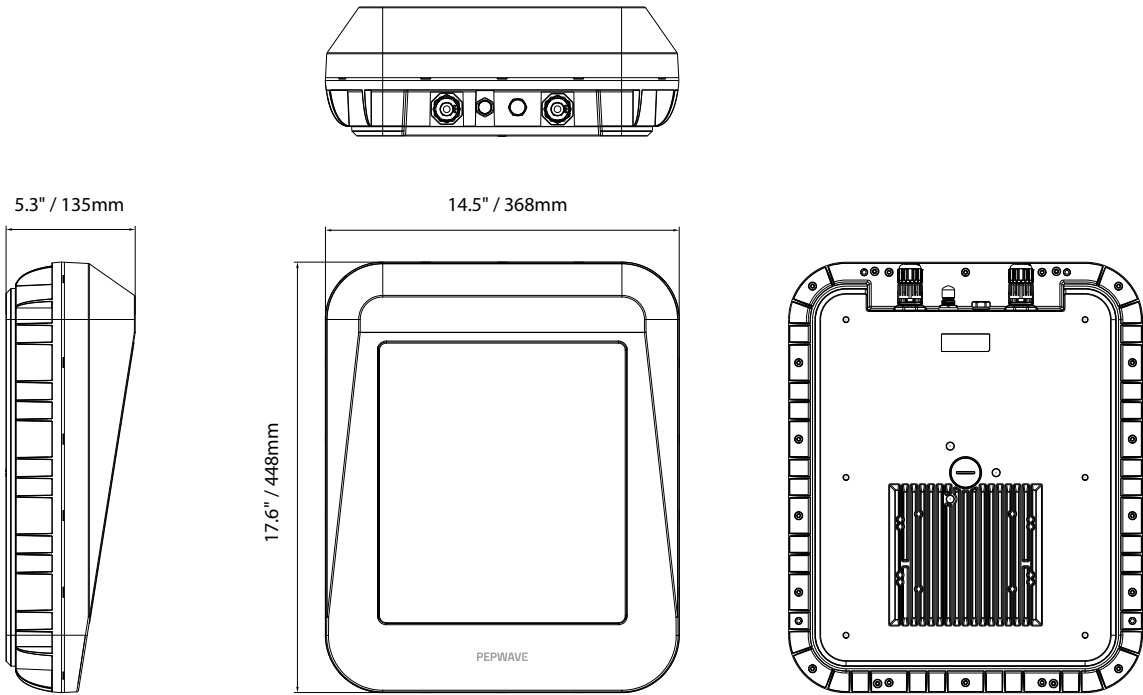


3800 MHz



## Packing List Information

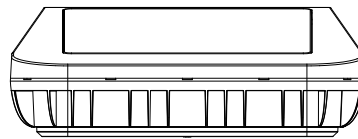
### Antenna



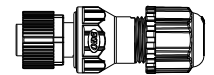
L-Wrench  
(T20 M4\*8)



M25 Hole Plug  
(1 pc)



RJ45 Caps  
(2 pcs)



DC Cable Connector  
(1 pc)



Bolt  
T20 M4xL20  
(4 pcs)



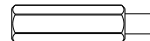
Bolt  
T20 M4xL10  
(20 pcs)



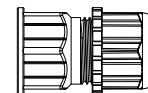
Bolt  
T20 M4xL8  
(12 pcs)



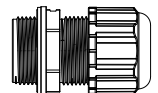
M4 Spring Washer  
(4 pcs)



M4 HEX Standoff Screw  
(4 pcs)

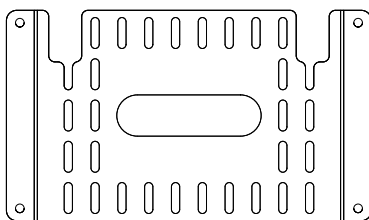


RJ45 Gland  
(2 pcs)

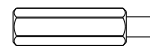


M25 Cable Gland  
(2 pcs)

### PoE Splitter Mount Set



Splitter MAX S Mount  
(1 pc)



M4 HEX Standoff Screw  
(4 pcs, M4xL27)



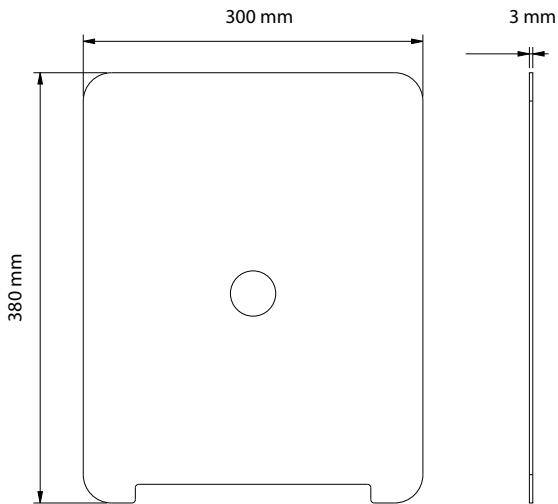
Bolt  
(4 pcs, T20 M4xL8)



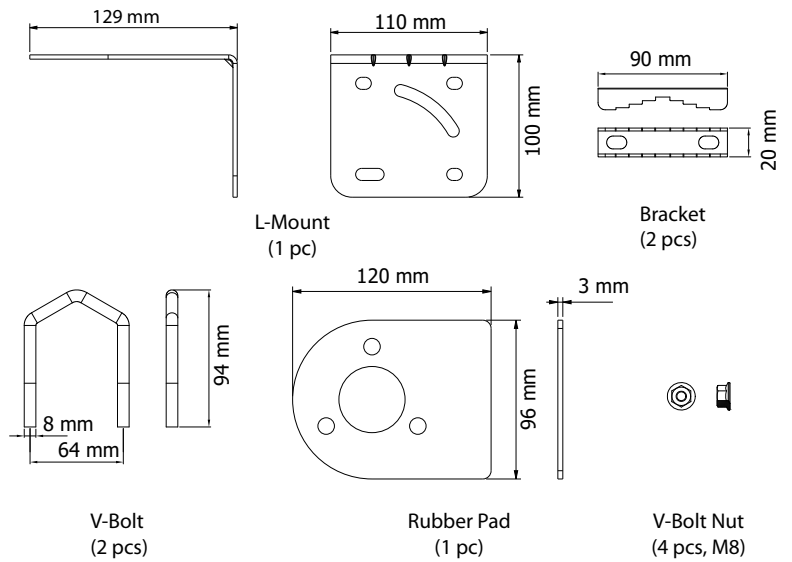
Spring Washer  
(4 pcs, M4)

## Packing List Information

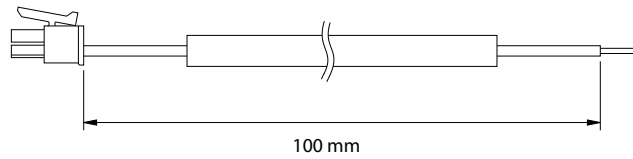
### Adhesive Pad



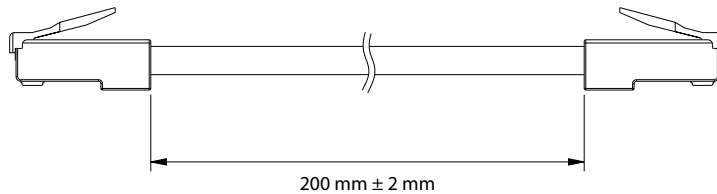
### L-Mount Mount Set



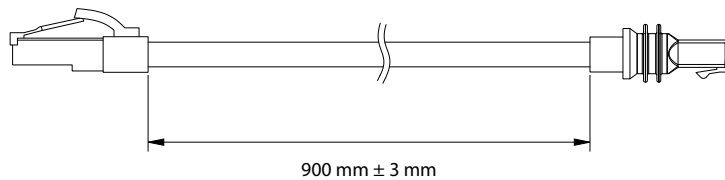
### Cables



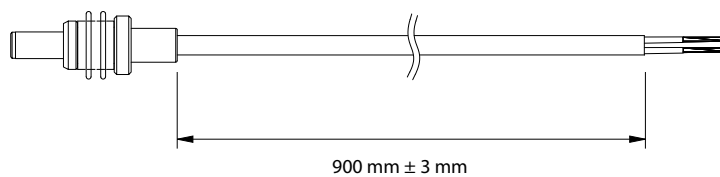
DC Cable



Ethernet Cable



Starlink Ethernet Cable

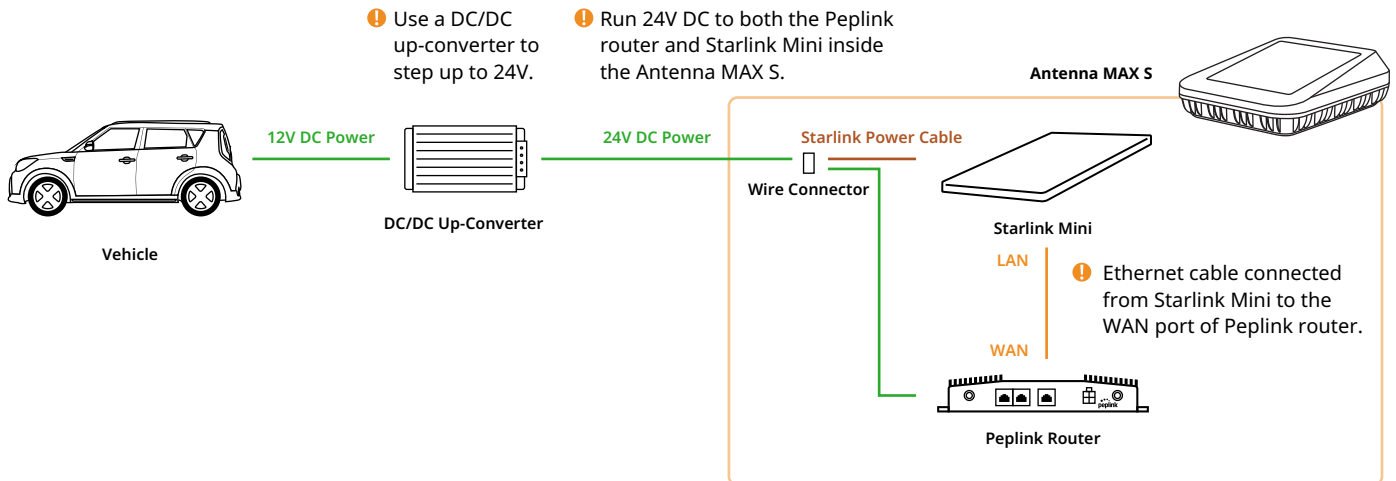


Starlink Power Cable

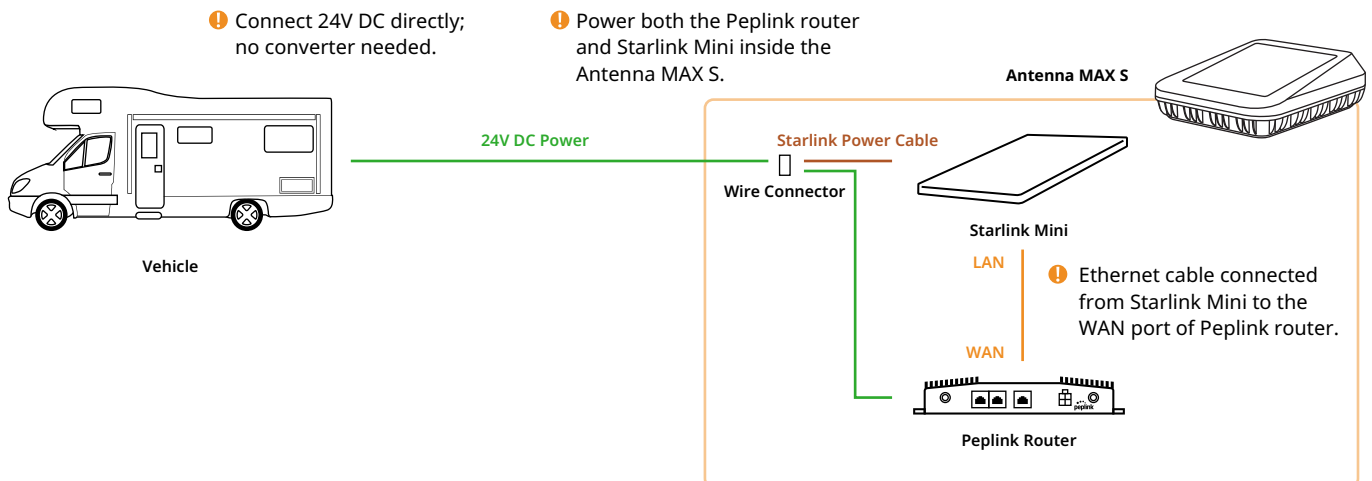
## FAQ

Q. What are the recommended vehicle power setups for the Antenna MAX S with a Peplink router and Starlink Mini?

### 12V Vehicle Battery



### 24V Vehicle Battery



## FAQ

Q. How does Power over Ethernet (PoE) work for Antenna MAX S installations?

802.3bt 90W PoE

