

# MOBILITY 40G

4x4 MIMO 5G Ready Cellular Antenna System with GPS antenna

# **Features**

- 4x4 MIMO 5G ready cellular antenna system with GPS antenna
- Cellular frequencies 600-6000 MHz
- B71 Support
- Durable and UV-stable housing
- Black or white color options
- IP68 rated



















### **Overview**

Antenna elements 4x LTE, 1x GPS

**Cellular frequencies** 0.3dBi@ 617-960MHz

5.1dBi@ 1710-2700MHz 5.8dBi@ 3400-4200MHz 7.0dBi@ 4900-6000MHz

Cellular bands LTE bands B1 to B86

(except B31, B72, B73, B87, B88),

5G bands n1 to n99

**GPS frequency bands** 1.6dBi, LNA 28dB:

1561-1602MHz

IP rating IP68

**Dimensions** (Height) 1.42" / 36mm (spigot not included)

(**Diameter**) 5.12" / 130mm

Coax cable type CFD-200 (4G/5G, Wi-Fi)

RG-174 (GPS)

Connector Type SMA male, QMA male,

N-type male

## **Description**

The Peplink Mobility 40G is a 5G ready multi-band antenna built for land-based mobile applications. It supports 4x4 MIMO for high bandwidth and solid reliability. It is also 5G ready and supports a wide range of global cellular frequencies. The GPS antenna is equipped with high gain LNA, making it ideal for location tracking.

The Mobility 40G has a solid housing made of UV stable plastic materials. Two color options are available (black and white) to fit different deployments. For easier installation, the antenna comes with different cable length options, available in SMA, QMA or N-type.

## **Applications**

- Public Safety and mission critical connectivity
- Mobile healthcare
- Transportation Connectivity

# Mobility 40G

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### sales@peplink.com

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## **Specification**

Antenna elements 4 elements

**Cellular frequencies** 0.3dBi@ 617-960MHz

5.1dBi@ 1710-2700MHz 5.8dBi@ 3400-4200MHz 7.0dBi@ 4900-6000MHz

LTE bands B1 to B86 Cellular bands

(except B31, B72, B73, B87, B88),

5G bands n1 to n99

**VSWR** < 2.5 over 85% of the band

10W Feed power handling Input impedance 50 Ω **Polarisation** Linear

**Ground plane** Not required#

Frequency range 1561-1602 MHz

0.5dBi@1575MHz Peak gain

1.6dBi@1602MHz

**VSWR** < 2.5

**Output return loss** 10dB max 28 ±3dB Gain: LNA

1.5dB max at 3.3V Noise figure

3.3V **Operating Voltage** 

**Power consumption** 8.5 ±2.5mA at 3.3V

CFD-200 **Type** 

0.33 dB/m @ 900 MHz Loss

0.49 dB/m @ 2000 MHz 0.55 dB/m @ 2500 MHz 0.87 dB/m @ 5800 MHz

Diameter 13/64" / 5.0mm

Jacket Half matt PVC, UV resistant

**Termination** SMA male, QMA male,

N-type male

RG-174 Type

3.4 dB/m @ 1000 MHz Loss

4.9 dB/m @ 1800 MHz

Diameter 0.1" / 2.7mm

Half matt PVC, UV resistant lacket

**Termination** SMA male, QMA male,

N-type male

 $^{*}\!$ All measurements stated in this document were obtained without a ground plane.

Mounting hole 1 11/16" / 43mm 19/32" / 15mm Max panel thickness lobility 40G

**Product dimensions** 

Supported types

(Height) 1.42" / 36mm (spigot not included)

(Diameter) 5.12" / 130mm

8.90" x 8.46" x 4.29" / **Packaged dimensions** 

226 x 215 x 109mm

Panel, wall, pole

UV stable PC+ABS Radome material

Antenna Mobility 40G

Mounting bracket Mounting

Double sided 3M adhesive pad Diameter: 5.08" / 129mm Thickness: 0.08"" / 2mm

UL 758 (VW-1) **Cable flammability** 

RoHS, REACH & WHEE Compliance

**UL 94 HB Enclosure flammability** 

IP rating

Operating temperature -40° - 176°F / -40° - 80°C Storage temperature -40° - 176°F / -40° - 80°C Salt Spray MIL-STD 810F/ASTM 8117

UI 746C **UV** resistance rating

(F1, long-term UV exposure)

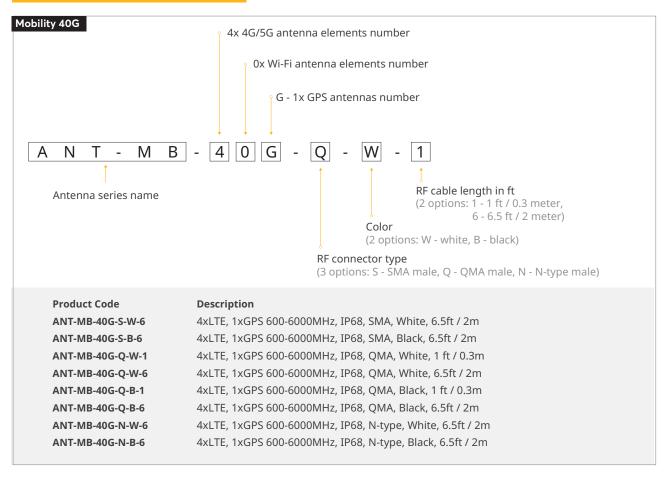
Wind Survival 167mph, 268 km/h

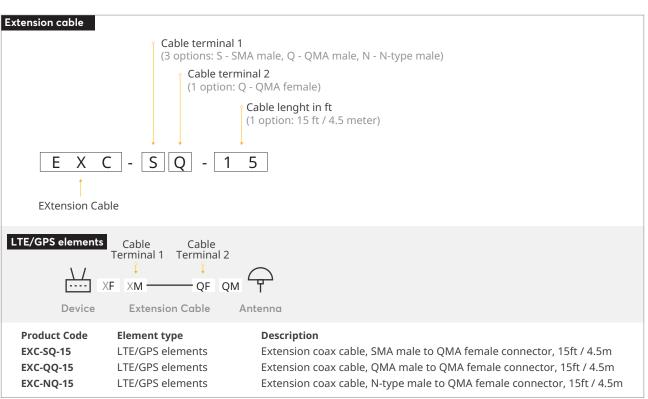
\*All measurements stated in this document were obtained without a ground plane.





### **Ordering information**



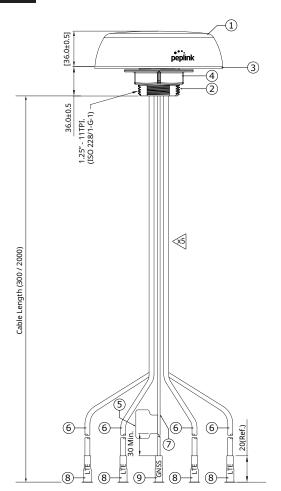


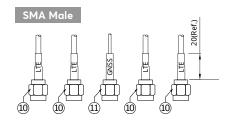


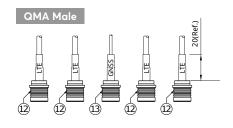
# Technical drawing

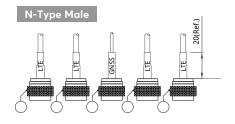
(unit: mm)

Antenna



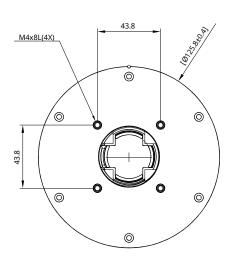






### Index

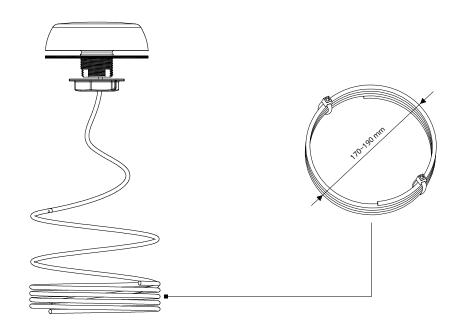
IIIGGA	



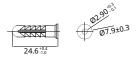


# Technical drawing

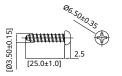
(unit: mm)



### Mounting Set



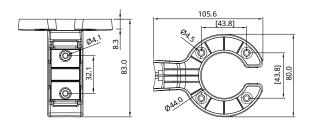
Plastic fixing for M3.5 screw (2 pcs)



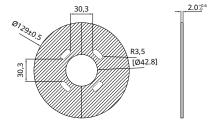
Tapping screws (2 pcs, M3.5\*24L)



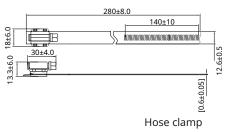
Screws (4 pcs, M4\*15L)

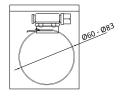


Mounting bracket



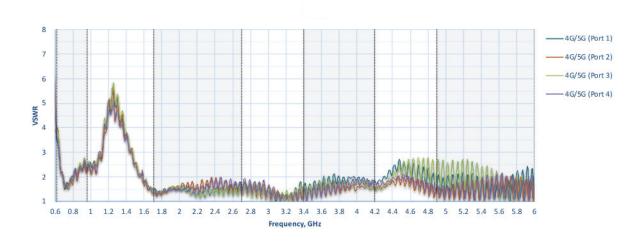
Double sided 3M adhesive pad







# Cellular Antenna VSWR

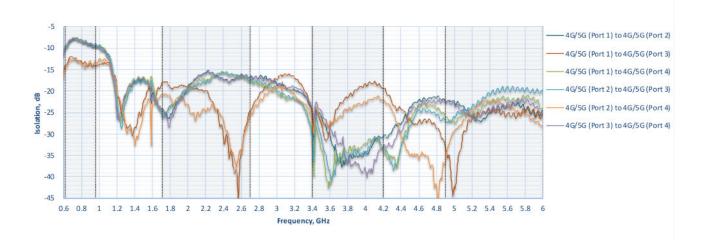


# Cellular Antenna Gain

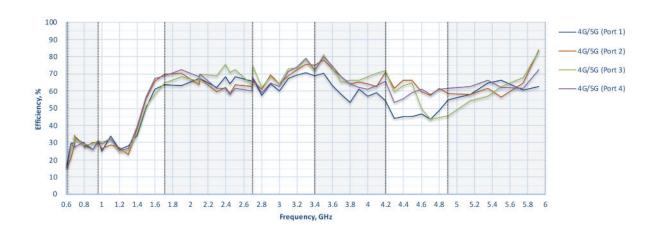




# Cellular Antenna Isolation



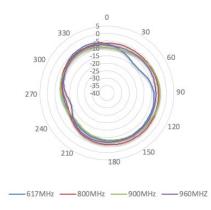
# Cellular Antenna Efficiency



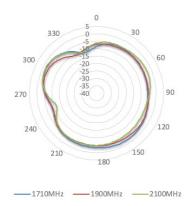


# Radiation patterns (Azimuth)

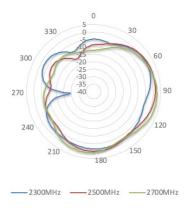
### 617-960 MHz



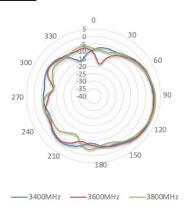
### 1710-2100MHz



### 2300-2700 MHz

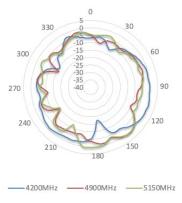


### 3400-3800 MHz

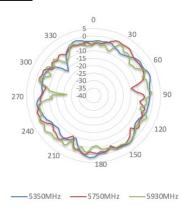


### 4200-5150 MHz

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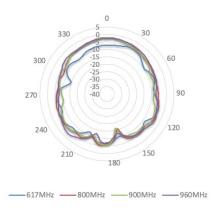
### 5350-5925 MHz



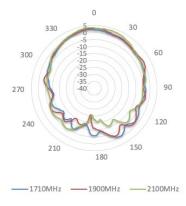


# Radiation patterns (Elevation 1)

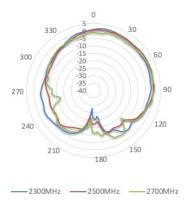
### 617-960 MHz



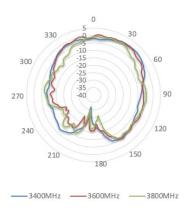
### 1710-2100MHz



### 2300-2700 MHz

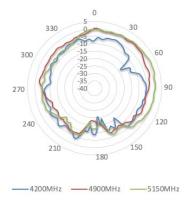


### 3400-3800 MHz

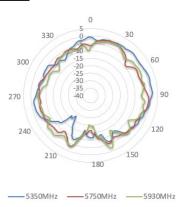


### 4200-5150 MHz

**Mobility 40G** 



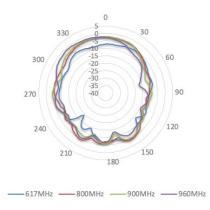
### 5350-5925 MHz



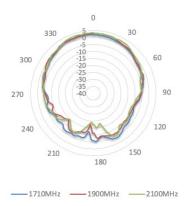


# Radiation patterns (Elevation 2)

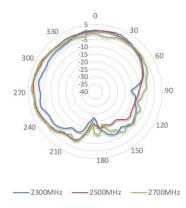
### 617-960 MHz



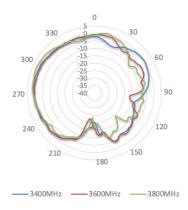
### 1710-2100MHz



### 2300-2700 MHz

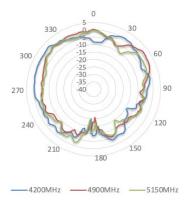


### 3400-3800 MHz

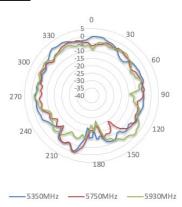


### 4200-5150 MHz

**Mobility 40G** 



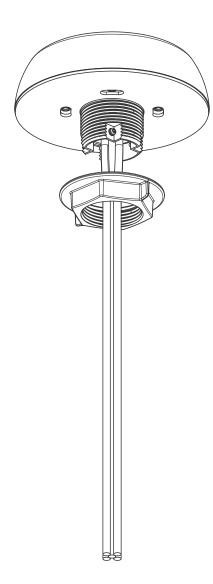
### 5350-5925 MHz



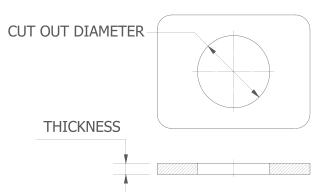


# **Installation recommendation**

Panel Mount







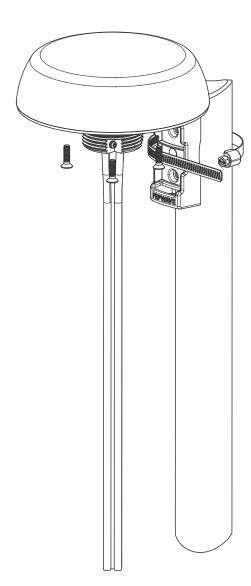
# Notes

- Cover panel surface to protect the paint work. When drilling a hole, start with a small one, then increase it.
- Cut out diameter should be 1 11/16" / 43mm. Maximum allowed panel thickness - 15mm.
- After a drill clean up the surface and apply some paint around the hole to prevent corrosion. Attach the antenna.

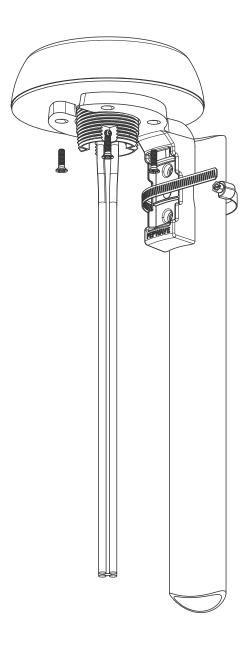


# Installation recommendation

Pole Mount



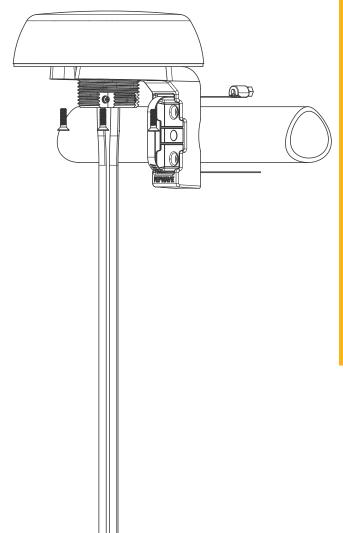
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# Installation recommendation

Horizontal Pole Mount



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