



MOBILITY 42G

7-in-1 Cellular & Wi-Fi Antenna System with GPS Receiver

Overview

- **Built for 5G**
Omni-directional 4x4 MIMO mobile antenna for the best performance.
- **C-Band support**
Exceptional performance in 3.3 and 4.2 GHz frequency range allowing to get a massive throughput speed boost.
- **Ultra wide bandwidth**
Wide frequency range (600-6000MHz) supporting LTE and 5G
- **Wi-Fi**
2x2 MIMO dual band (2.4GHz & 5GHz) high gain omnidirectional antennas
- **Robust design**
IP68 rated, low profile and durable housing in Black or White color options.

Applications

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

8.2
dBi

↑↓
LTE

Wi-Fi

GPS

IP
68

B71
Support

Built for
5G

C-
Band
Support

Specification

Cellular

Antenna elements	4 elements
Cellular frequencies [#]	4.4dBi@617-960MHz 7.8dBi@1710-2700MHz 7.9dBi@3400-4200MHz 8.2dBi@5000-6000MHz
Cellular bands	LTE bands B1 to B86 (except B31, B72, B73, B87, B88), 5G bands n1 to n99
VSWR	< 2.5 over 95% of the band
Feed power handling	10W
Input impedance	50 Ω
Polarisation	Linear
Ground plane	Not required

Wi-Fi

Antenna elements	2 elements
Peak Gain & Frequencies	5.0dBi: 2400-2500MHz 7.5dBi: 5000-6000MHz
VSWR	< 2.5
Feed power handling	10W
Input impedance	50 Ω
Polarisation	Linear

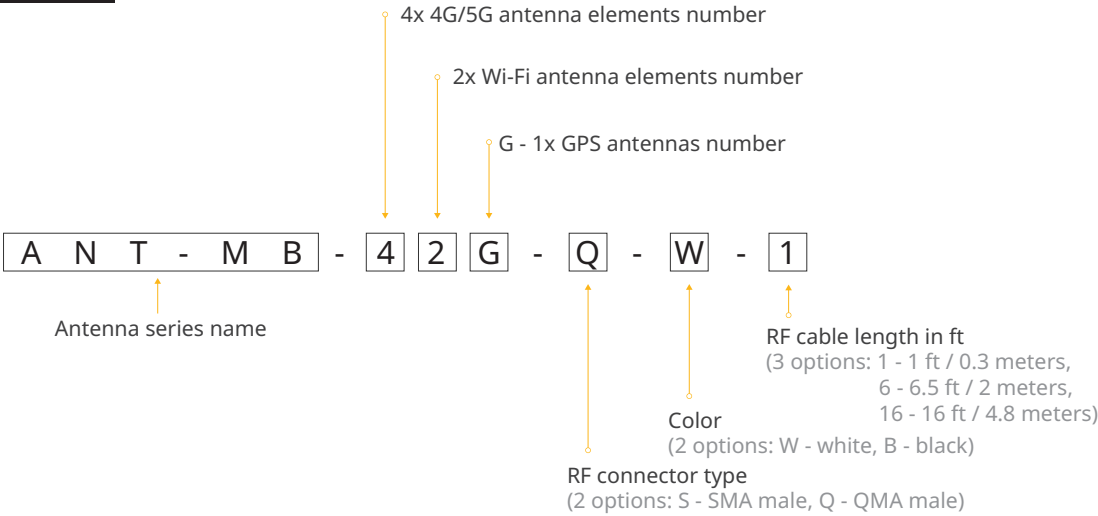
GPS

Frequency range	1561-1602 MHz
Peak Gain & Frequencies	0.5dBi@1575MHz 1.6dBi@1602MHz
VSWR	< 2 dB
Output return loss	10dB max
LNA Gain	28 ±3dB
Noise figure	1.5dB max at 3.3V
Operating Voltage	3.3V
Power consumption	8.5 ±2.5mA at 3.3V

Cable (LTE / 5G, Wi-Fi)

Ordering Information

Mobility 42G



Product Code	Description
ANT-MB-42G-S-W-1	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White, 1 ft / 0.3m
ANT-MB-42G-S-B-1	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), Black, 1 ft / 0.3m
ANT-MB-42G-S-W-6	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White, 6.5 ft / 2m
ANT-MB-42G-S-B-6	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), Black, 6.5 ft / 2m
ANT-MB-42G-S-W-16	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, SMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White, 16 ft / 4.8m
ANT-MB-42G-Q-W-1	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, QMA male, White, 1 ft / 0.3m
ANT-MB-42G-Q-W-6	4xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP68, QMA male (Cellular, GPS), RP-SMA male (Wi-Fi), White, 6.5 ft / 2m
ANT	



Featured Add-on

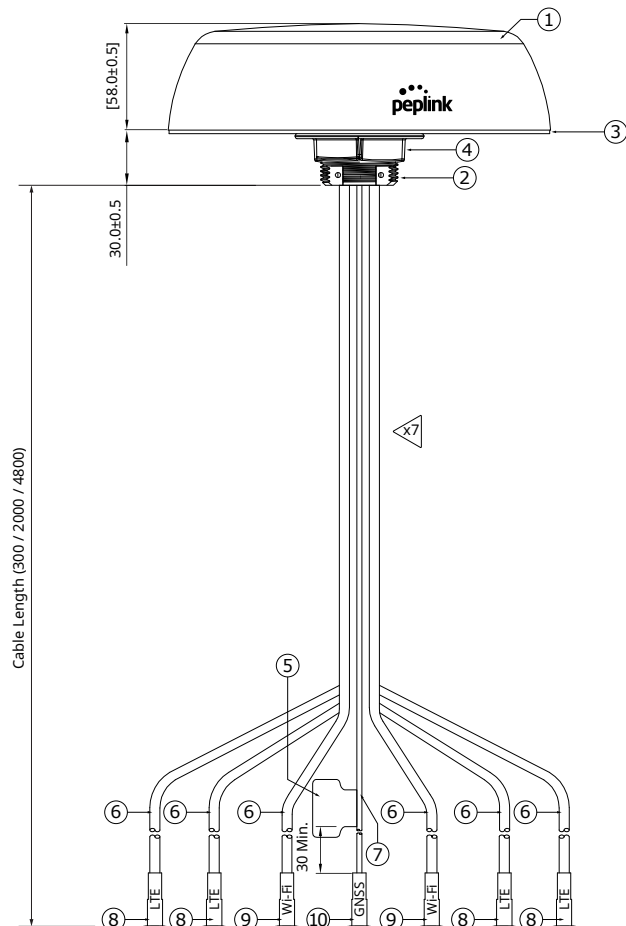
Product Code	Description
ACW-661	3M Double-sided Adhesive Antenna Mounting Gasket
ACW-881	Wall/pole L-mount Antenna mounting kit (white)
ACW-884	Wall/pole L-mount Antenna mounting kit (black)
ACW-651	Maritime 1" 14TPI Female to Mobility Antenna thread
ACW-653	Maritime 1 1/4" 11TPI male adapter

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Technical drawing

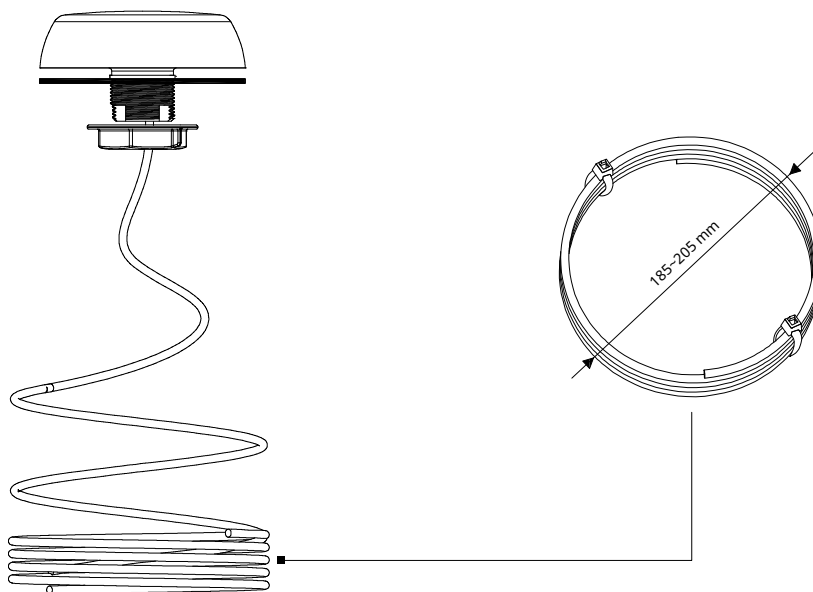
(unit: mm)

Antenna

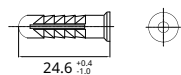


Technical drawing

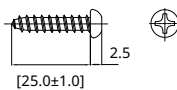
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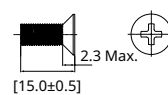
Mounting Set



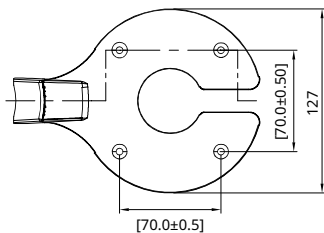
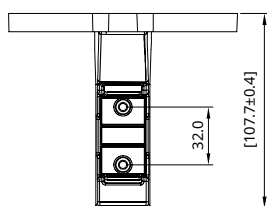
Plastic fixing for M3.5 screw
(2 pcs)



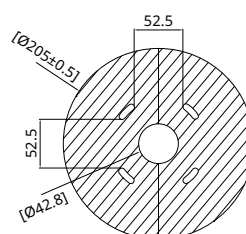
Tapping screws
(2 pcs, M3.5*24L)



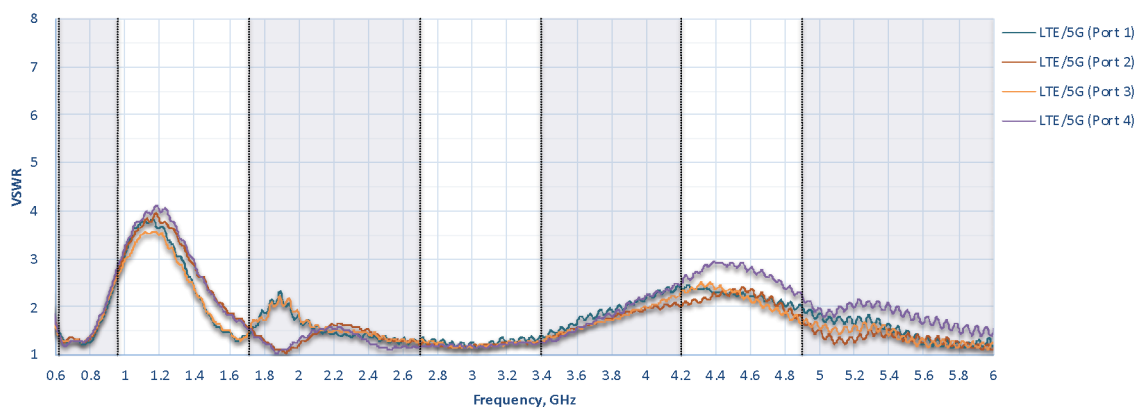
Screws
(4 pcs, M4*P0.7*15L)



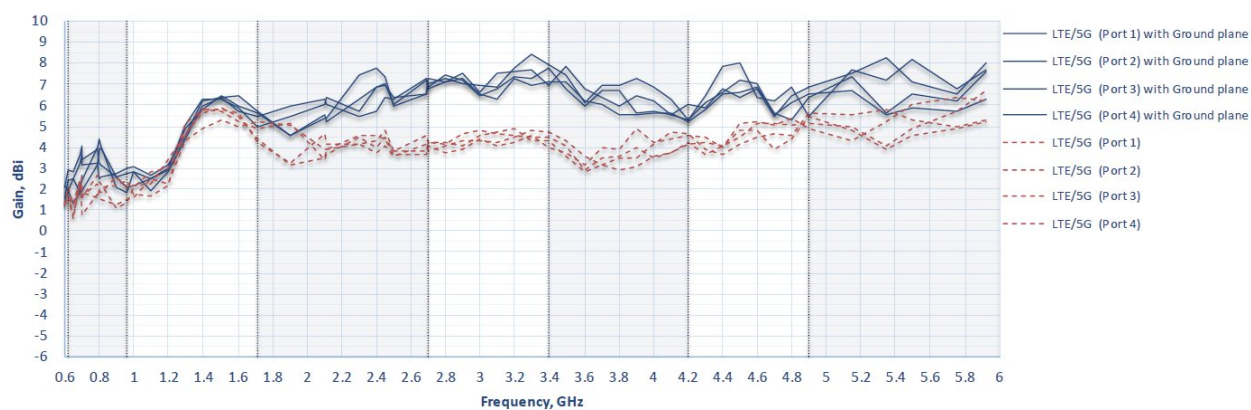
Mounting bracket



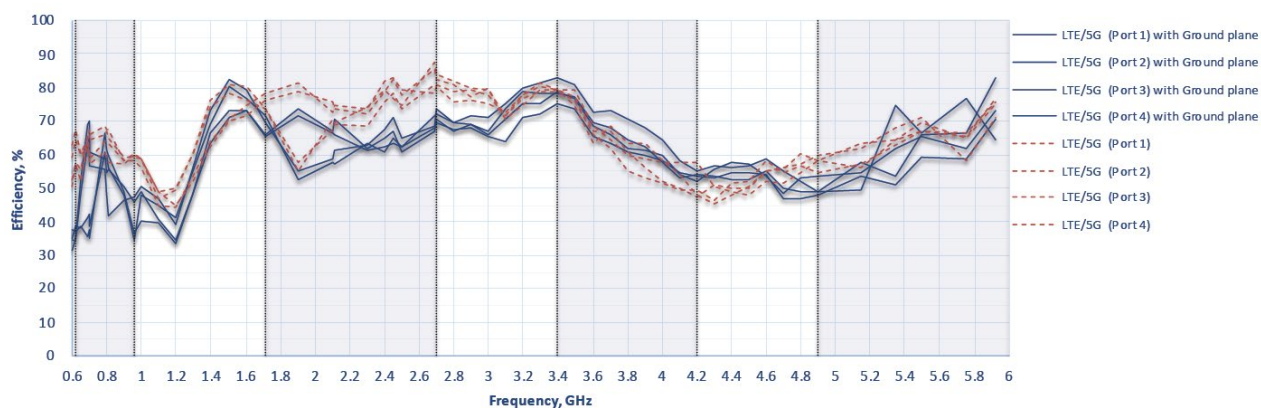
Cellular Antenna VSWR



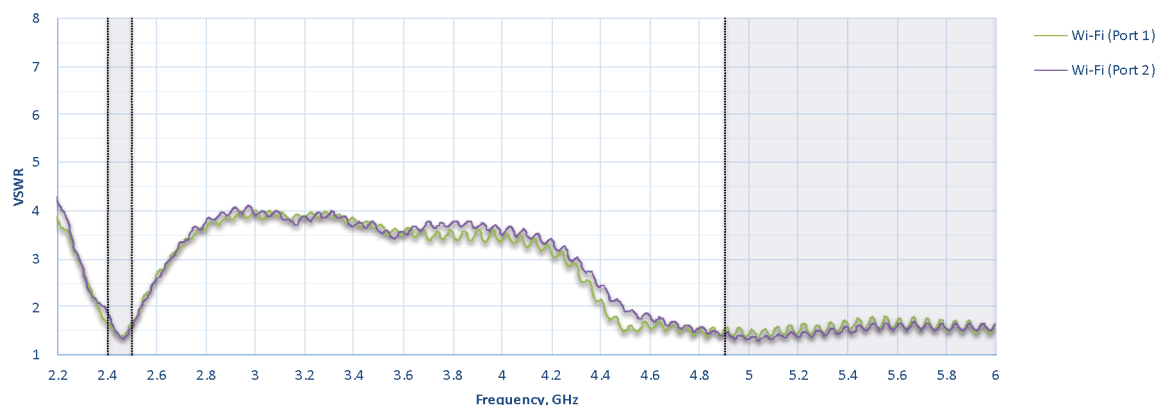
Cellular Antenna Gain



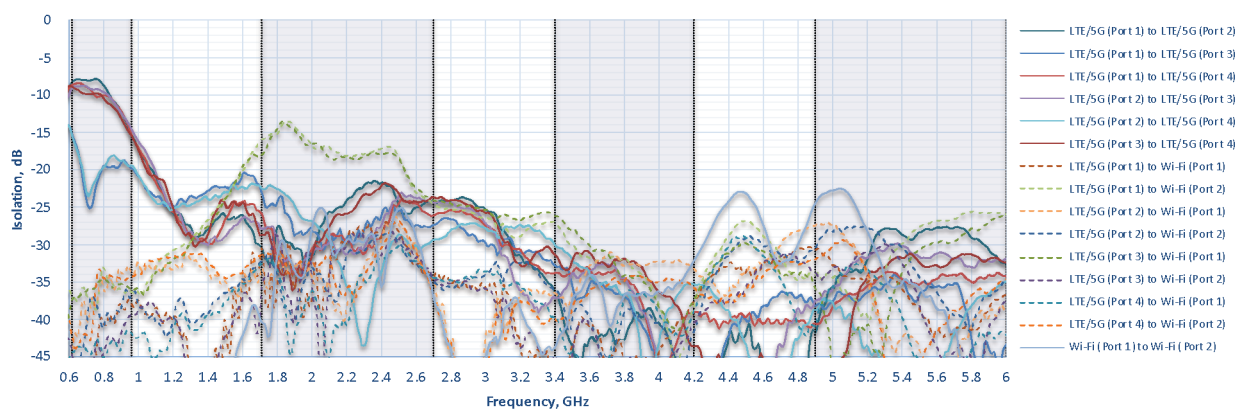
Cellular Antenna Efficiency



Wi-Fi Antenna VSWR

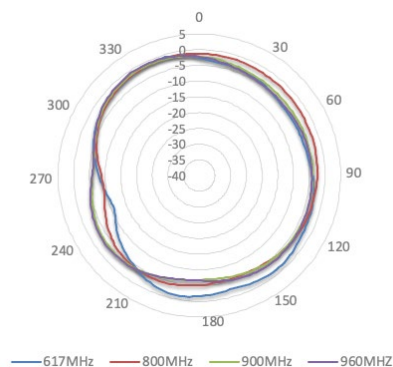


Antenna Isolation

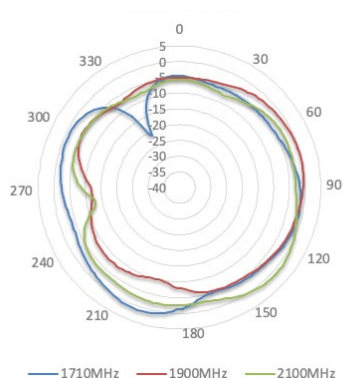


LTE Radiation Patterns (Azimuth)

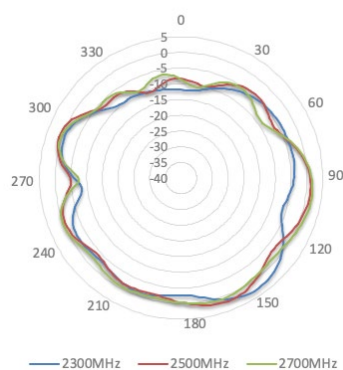
617-960 MHz



1710-2100MHz

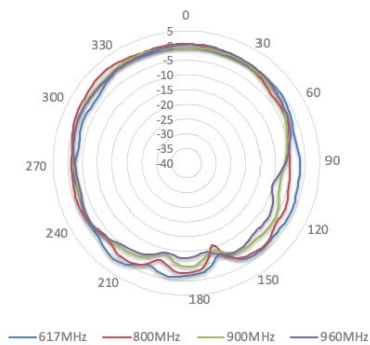


2300-2700 MHz

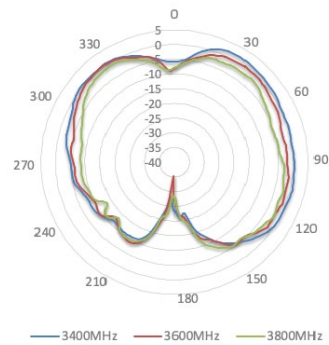


LTE Radiation Patterns (Elevation 1)

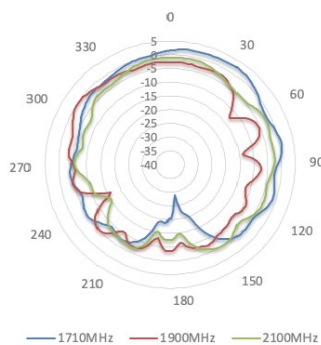
617-960 MHz



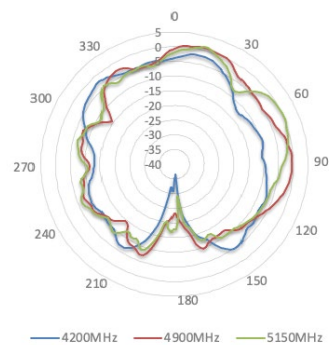
3400-3800 MHz



1710-2100MHz

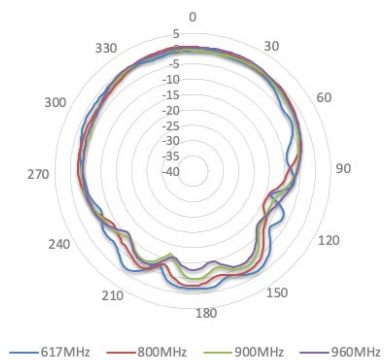


4200-5150 MHz

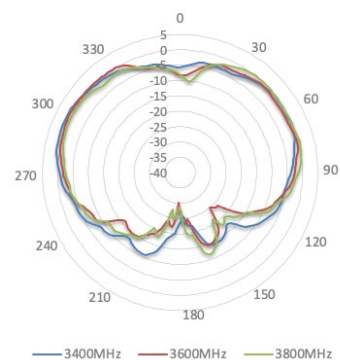


LTE Radiation Patterns (Elevation 2)

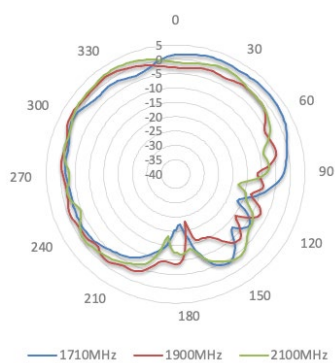
617-960 MHz



3400-3800 MHz



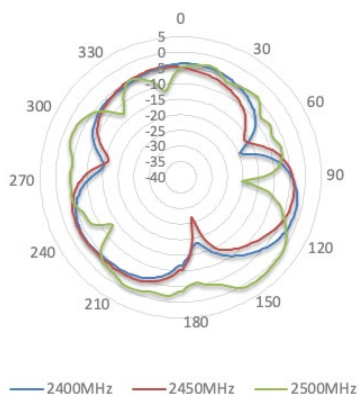
1710-2100MHz



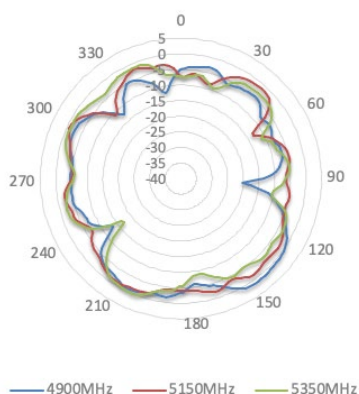
4200-5

Wi-Fi Radiation Patterns (Azimuth)

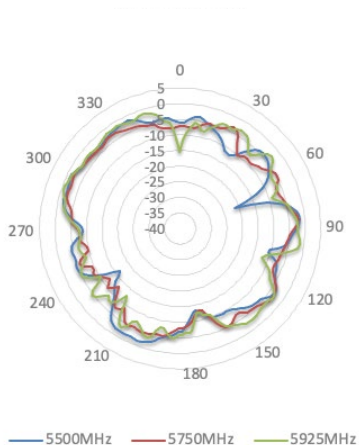
2400-2500 MHz



4900-5350 MHz



5550-5950 MHz

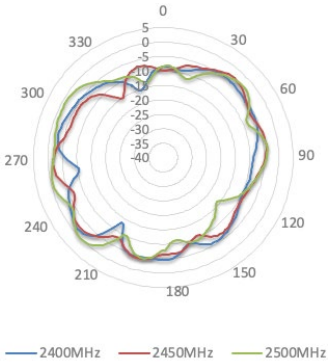


Wi-Fi Radiation Patterns (Elevation 1)

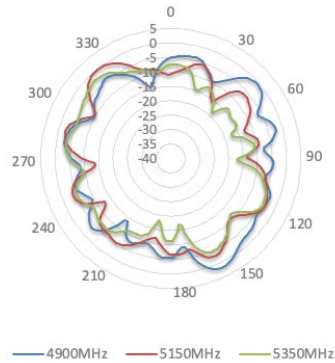


Wi-Fi Radiation Patterns (Elevation 2)

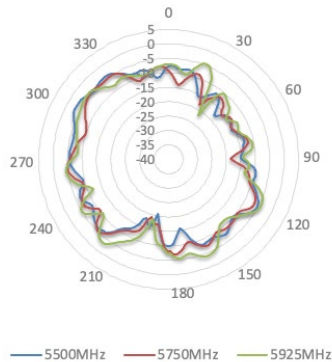
2400-2500 MHz



4900-5350 MHz



5550-5950 MHz



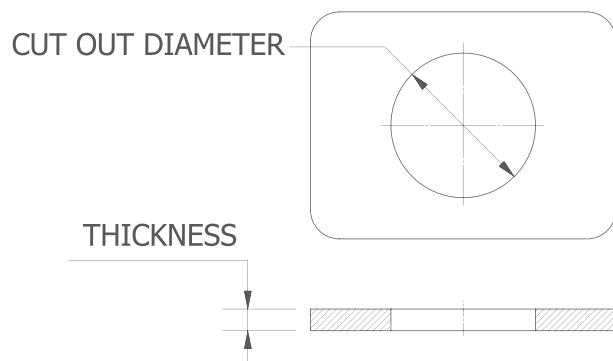
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Installation Recommendation

Panel Mount



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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 - 19/ 32" / 15mm.
- After drilling, 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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Installation Recommendation

Wall Mount



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