Mobility 82G

ref: 2401 - v02

Mobility 82G

Built for **5G**

Omni-directional 8x8 MIMO mobile antenna for the best performance.

Ultra Wide **Bandwidth**

Wide frequency range (600-6000MHz) supporting LTE and 5G connectivity in any location.

Robust **Design**

IP67 rated, low profile and durable housing.

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Easy **Installation**

Surface, panel installation for various applications.

Flexible **Applications**

- Public Safety & Mission Critical Connectivity
- Mobile Healthcare
- Transportation Connectivity

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Specifications

Cellular

Antenna Elements	8 elements
Peak Gain & Frequencies	5.4dBi: 617-960MHz 7.5dBi: 1400-2700MHz 8.1dBi: 3400-4200MHz 8.7dBi: 5000-6000MHz
VSWR	< 2.0 over 95% of the band
Feed Power Handling	10W
Input Impedance	50 Ω
Polarisation	Linear

GPS

Frequency Range	1575-1602 MHz
Peak Gain	1.2 dBiC: 1575MHz 2.0 dBiC: 1602MHz
VSWR	< 1.6
Output Return Loss	-10dB max
Gain: LNA	29 ± 3 dB
Operating Voltage	3.3 V
Power Consumption	6 ±2 mA at 3.3 V

WiFi

Antenna Elements	2 elements 6.0dBi: 2400-2500MHz 7.4dBi: 5000-6000MHz
VSWR	< 2.0
Feed Power Handling	10W
Input Impedance	50 Ω
Polarisation	Linear

Cable (LTE/5G, Wi-Fi)

Type	CFD-200
Loss	0.33 dB/m @ 900 MHz 0.49 dB/m @ 2000 MHz 0.55 dB/m @ 2500 MHz 0.87 dB/m @ 5800 MHz
Diameter	0.2 in. / 5.0 mm
Jacket	Half matt PVC, UV resistant
Termination	QMA male, SMA male, RP-SMA male (Wi-Fi)

Specifications are subject to change without notice.

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Specifications

Cable (GPS)

Type	RG-174
Loss	3.4 dB/m @ 1000 MHz 4.9 dB/m @ 1800 MHz
Diameter	0.1" / 2.7mm
Jacket	Half matt PVC, UV resistant
Termination	QMA male, SMA male

Mounting

Supported Types	Panel, surface (with additional mount) magentic (with additional mount)
Mounting Hole	1.7" / 43mm
Max Panel Thickness	up to 6.7" / 170mm

Mechanical

Product Dimensions	2.46” / 62.5 mm - Height (spigot not included) 16.83” / 427.4 mm - Diameter
Packaged Dimensions	20.16" x 20.09" x 9.06" 512x510x230mm
Radome Material	UV stable PC

Package Contents

Antenna	MB-82G
Accessories	Long and short thread Double sided 3M adhesive pad - Diameter: 15.2” / 386 mm - Thickness: 0.08” / 2 mm

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
Wind Survivability	137mph (220km/h)
Enclosure Flammability	UL 94 HB
Cable Flammability	UL 758 (VW-1)
UV Resistance	UL 746C (F1 long-term UV exposure)
Salt Spray	MIL-STD 810F/ASTM 8117

Ordering Information

Product Code	Description
ANT-MB-82G-S-W-6	8xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP67, SMA (Cellular, GPS), RP-SMA (Wi-Fi), White, 6.5 ft / 2m
ANT-MB-82G-Q-W-6	8xLTE/5G, 2x Wi-Fi, 1xGPS 600-6000MHz, IP67, QMA (Cellular, GPS), RP-SMA (Wi-Fi), White, 6.5 ft / 2m
ACW-667	Surface mount
ACW-668	Surface mount with magnets

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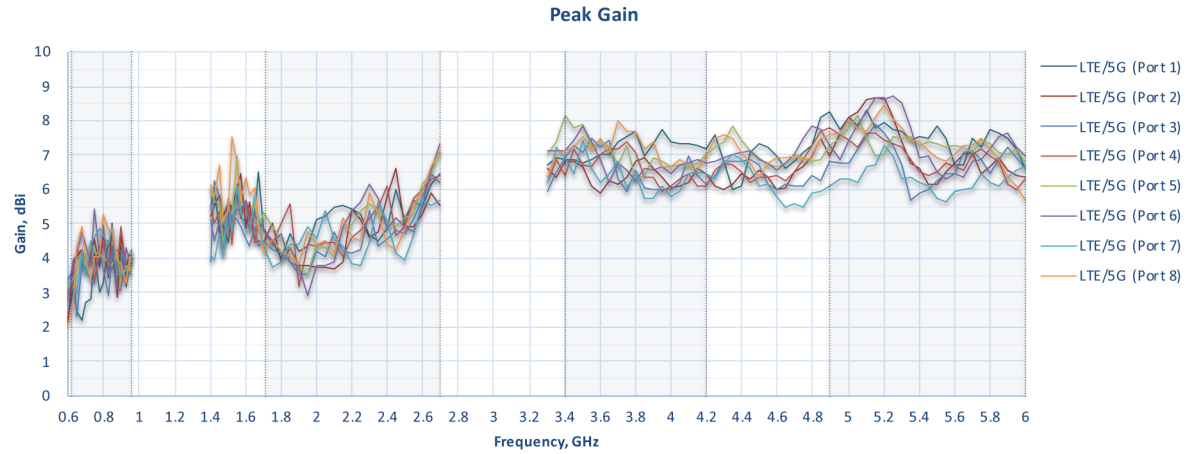
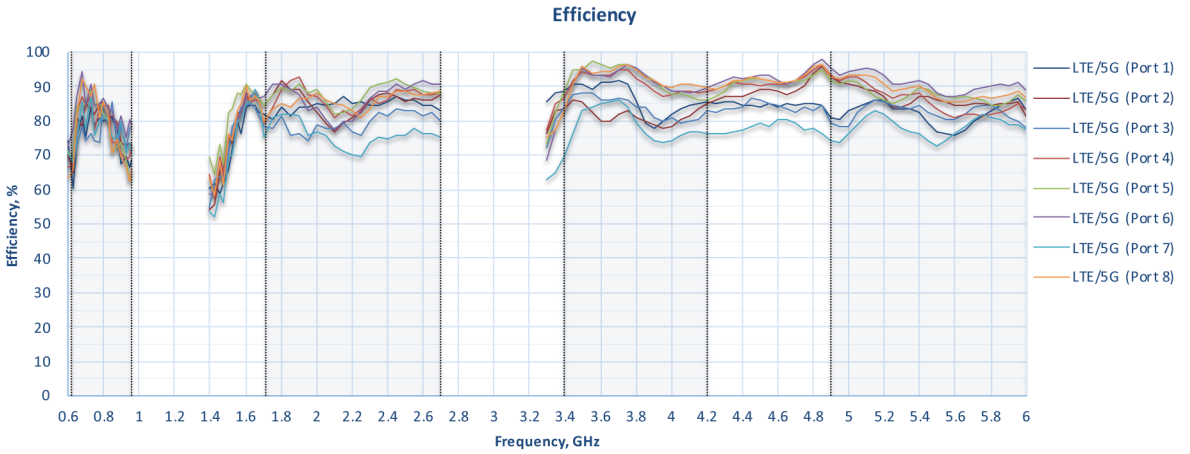
Graphs

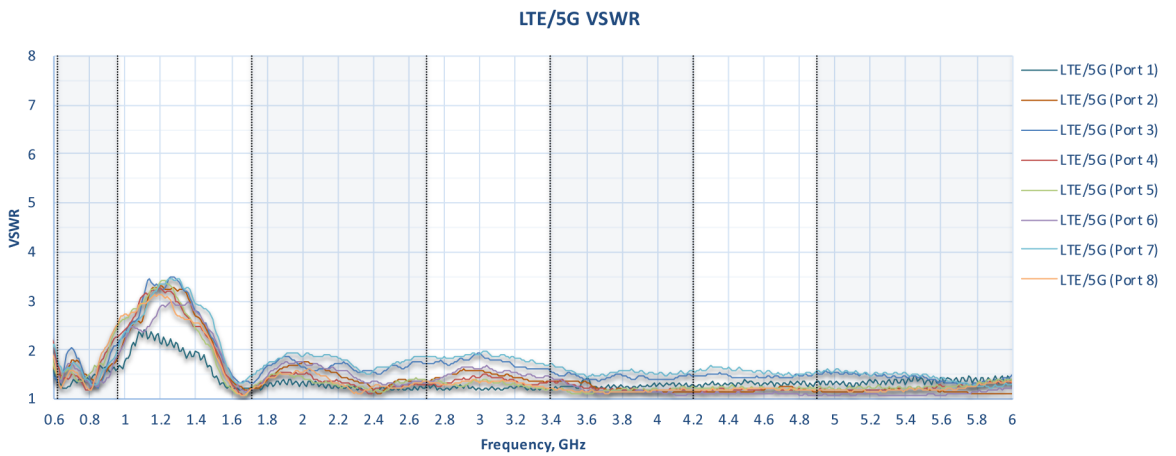
LTE/5G Antenna Gain



LTE/5G Antenna Efficiency



LTE/5G Antenna VSWR



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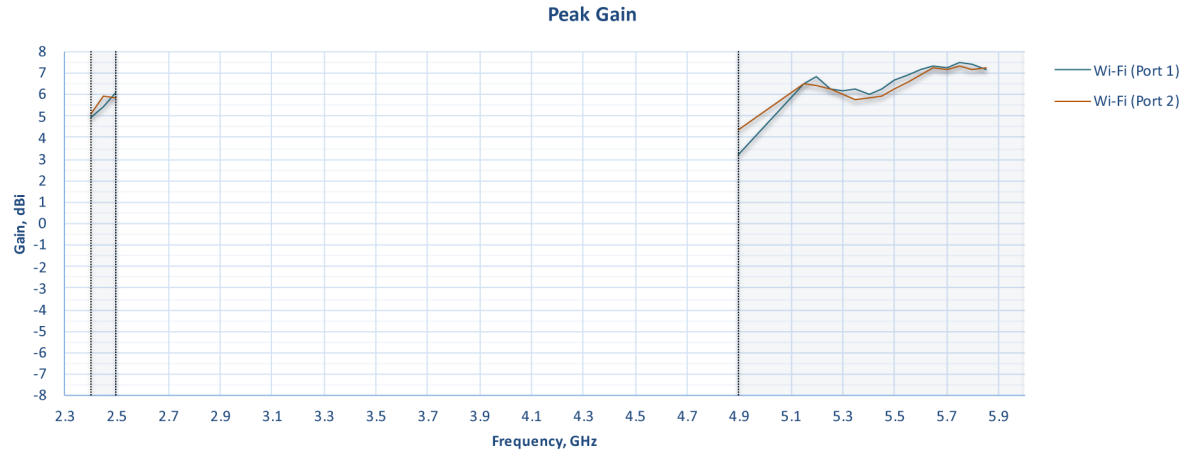
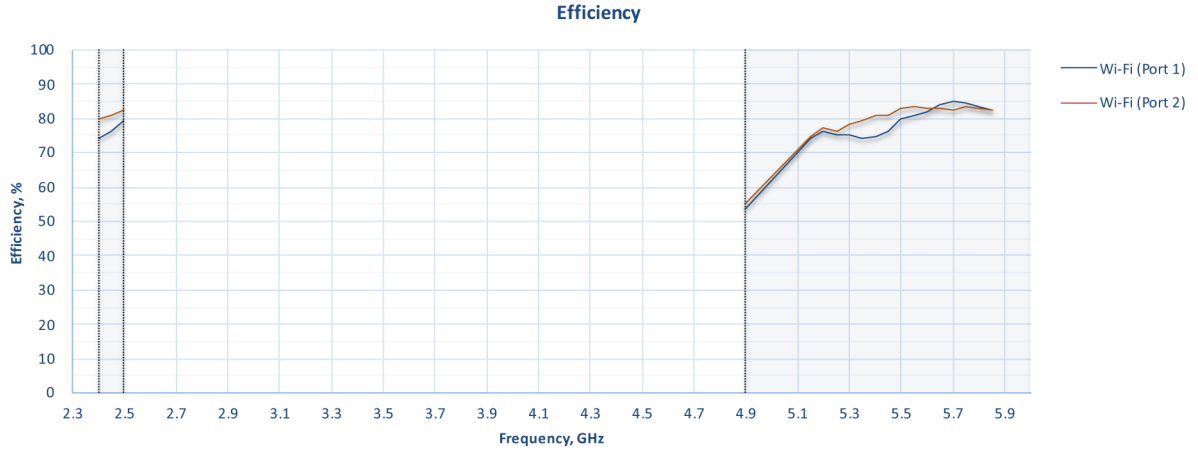
Graphs

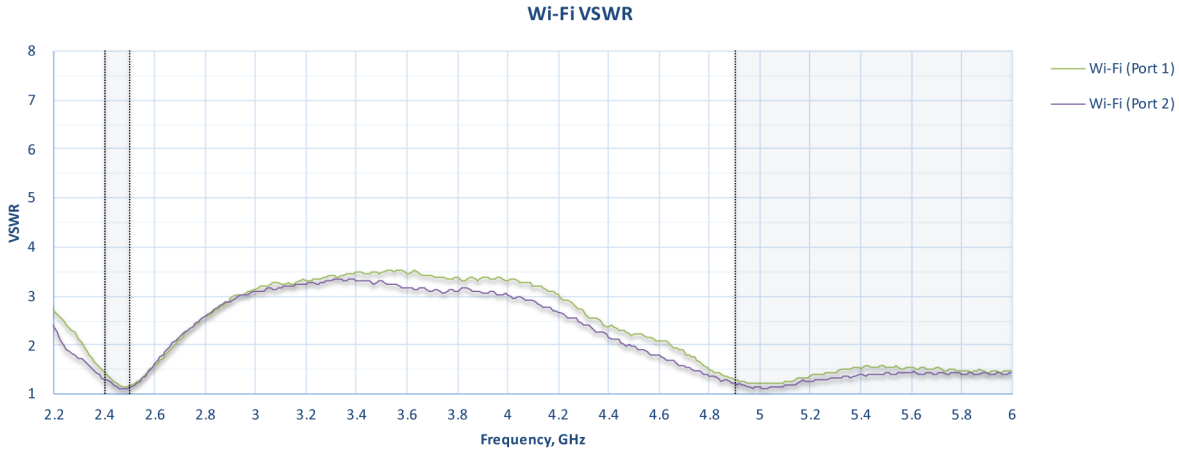
Wi-Fi Antenna Gain



Wi-Fi Antenna Efficiency



Wi-Fi Antenna VSWR



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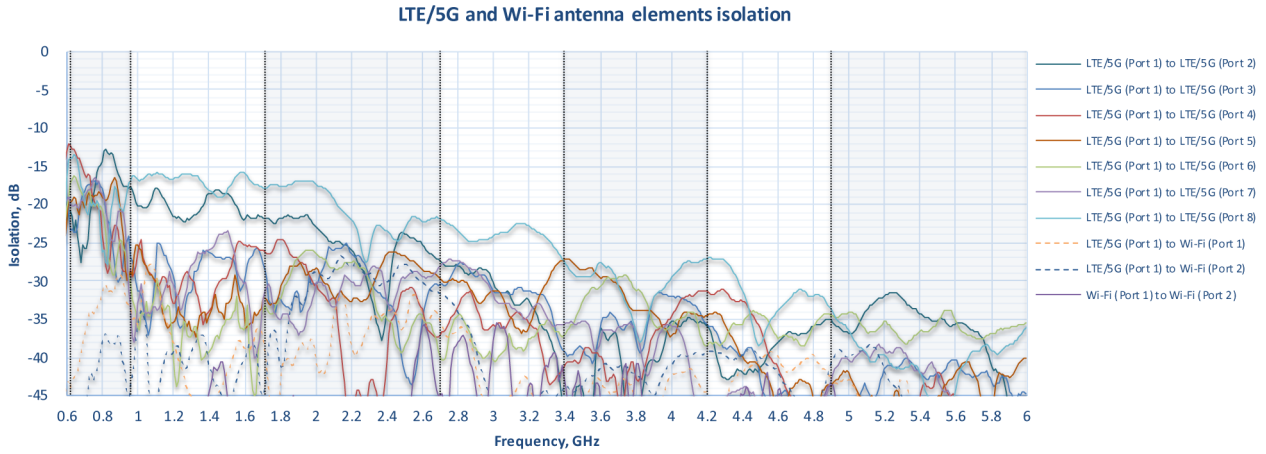
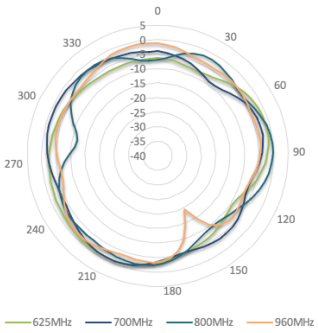
Graphs

LTE/5G & Wi-Fi Antenna Isolation

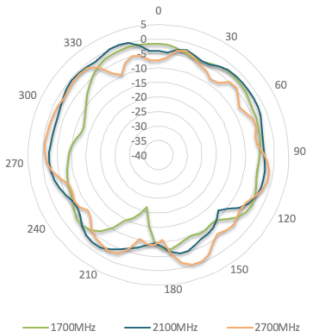


Radiation Pattern - LTE Radiation Patterns (Azimuth)

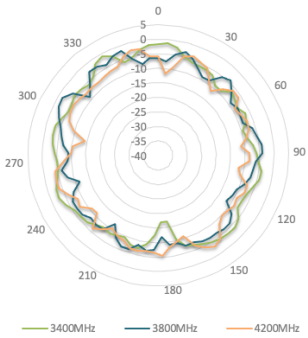
625 - 960MHz



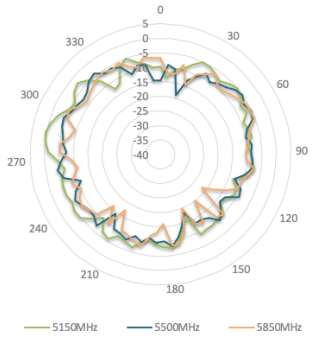
1700 - 2700MHz



3400 - 4200MHz



5150 - 5850MHz



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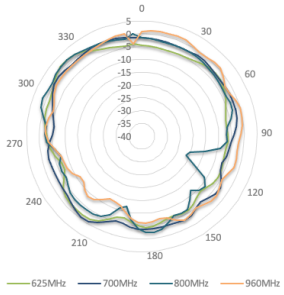
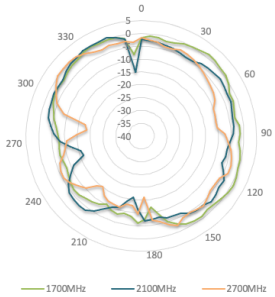
Graphs

Radiation Pattern - LTE Radiation Patterns (Elevation 1)

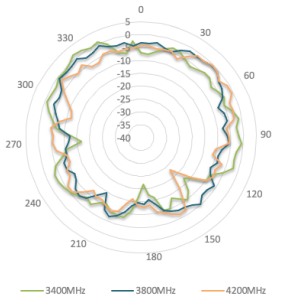
625 - 960MHz



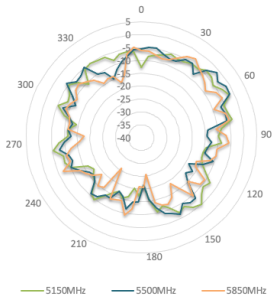
1700 - 2700MHz



3400 - 4200MHz

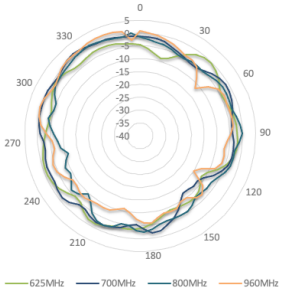


5150 - 5850MHz

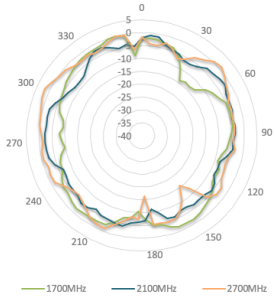


Radiation Pattern - LTE Radiation Patterns (Elevation 2)

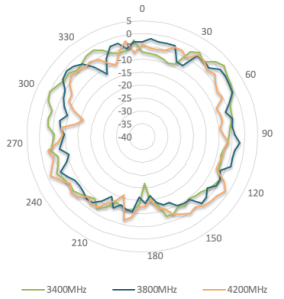
625 - 960MHz



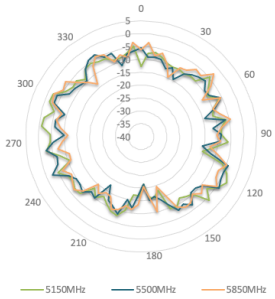
1700 - 2700MHz



3400 - 4200MHz



5150 - 5850MHz



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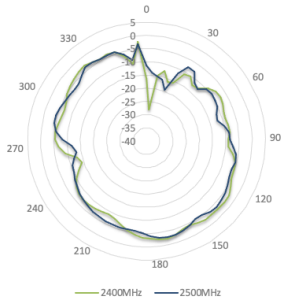
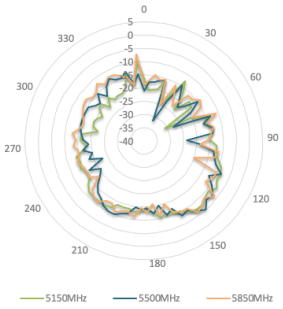
Graphs

Radiation Pattern - Wi-Fi Radiation Patterns (Azimuth)

2400 - 2500MHz

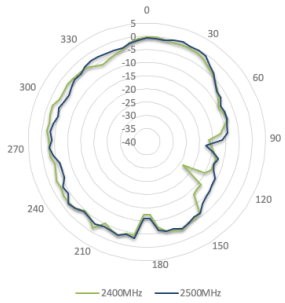


5150 - 5850MHz

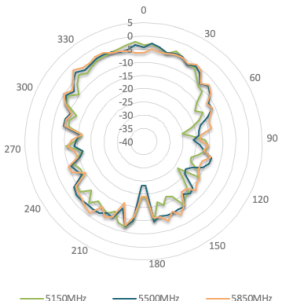


Radiation Pattern - Wi-Fi Radiation Patterns (Elevation 1)

2400 - 2500MHz

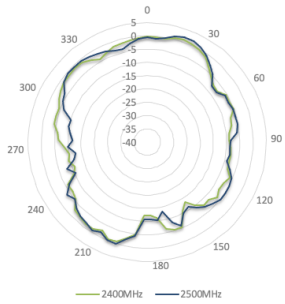


5150 - 5850MHz

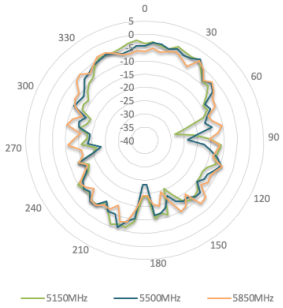


Radiation Pattern - Wi-Fi Radiation Patterns (Elevation 2)

2400 - 2500MHz



5150 - 5850MHz



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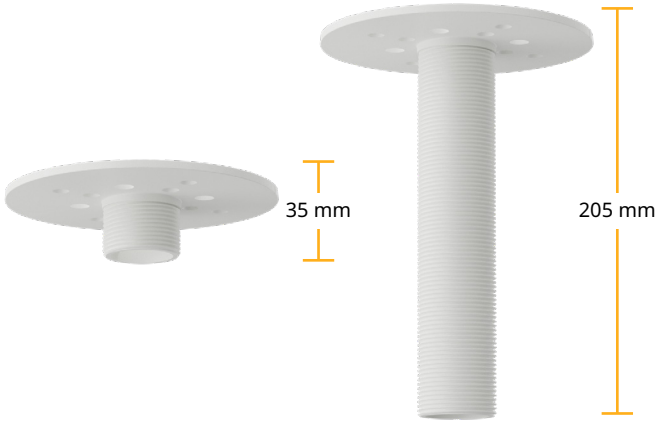
Installation Recommendation

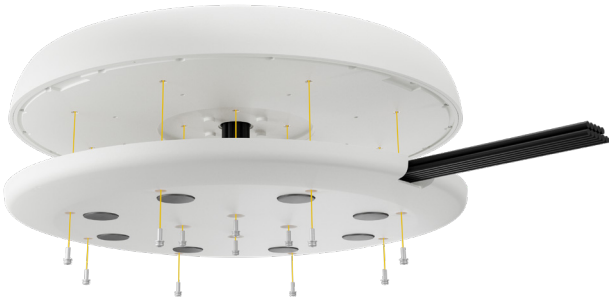
Panel (Though Hole)



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 - up to 6.7" / 170mm.
- After drilling, clean up the surface and apply some paint around the hole to prevent corrosion. Attach the antenna.

Magnetic Mount



Surface Mount