

Part No. X9001248-4GMSMB1000R

External Magnetic Mount LTE Antenna

700 / 800 / 900 / 1800 / 2100 / 2600 MHz

Supports: LTE Cat 1, LTE-M, SigFox, LoRa, NB-IoT, M2M applications, 2G, 3G, Cellular



KYOCERA AVX family of External antennas are designed to offer the best performances for a wide range of applications .X9001248 is specially developed to deliver stable Gain across 2G, 3G, 4G cellular bands.

This antenna is designed to be mounted on a ground plane for optimal performance

Electrical Specifications

Typical Characteristics in Free Space and on 300 x 250 mm ground plane

| Frequency (MHz) | Free space | | On 300 x 250 mm Ground Plane | |
|--------------------|------------|-------------|------------------------------|-------------|
| | 698 - 960 | 1710 - 2690 | 698 - 960 | 1710 - 2690 |
| Return Loss | < -5.2 dB | < -5.8 dB | < -5.2 dB | < -6.0 dB |
| Average Peak Gain | -0.5 dBi | -0.2dBi | 1.8 dBi | 1.9 dBi |
| Average Efficiency | 33 % | | 54% | 36% |
| Impedance | 50 ohm | | | |

External Magnetic Mount LTE Antenna

Low Band : 698 – 960 MHz

High Band : 1170 – 2690 MHz

KEY BENEFITS

Quicker Time-to-Market

Standard part means fewer design changes with, simple implementation

Easy Assembly using RP-SMA or SMA

Best in Class Performance

External antennas are designed to maintain high efficiency in a variety of device configurations

Great Flexibility

Standard connector to makes easy set-up

RoHS Compliant

Products are the latest RoHS version compliant.

APPLICATIONS

- Telematics
- Smart metering
- Home automation
- Smart city
- Structural health monitoring
- Predictive maintenance
- M2M devices

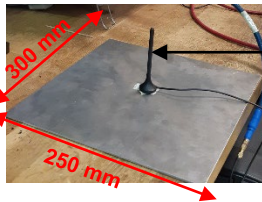
Mechanical Specifications & Ordering Part Number

| Ordering Part Number | X9001248-4GMSMB1000R |
|----------------------------|------------------------------------|
| Dimensions (mm) | 112.0 height 29.0 base diameter |
| Connector Type | SMA Male |
| Weight (grams) | 50.0 |
| Mounting | Magnetic |
| Color | Black |
| Cable | RG-174 / U (1 meter) |
| Ingress Protection | IP65 |
| Operating Temperature (°C) | -40 to + 70 |
| Radome Material | TPE |

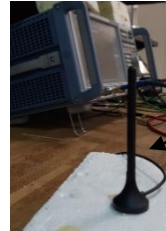
LTE Magnetic mount External antenna specifications
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

Return Loss, Efficiency and Peak Gain Plots

Typical performance measured in Free Space and on a 300x250mm ground plane

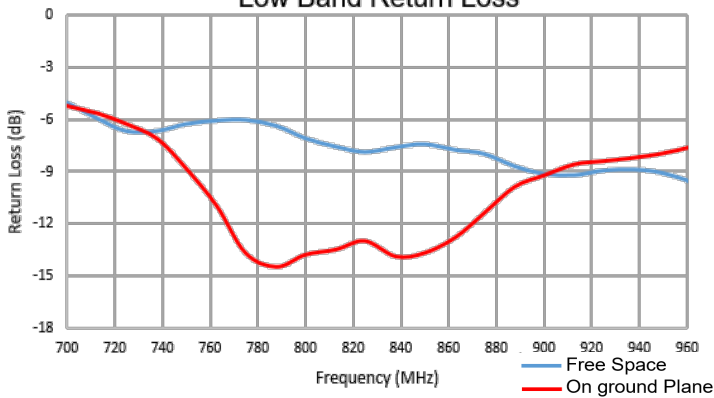


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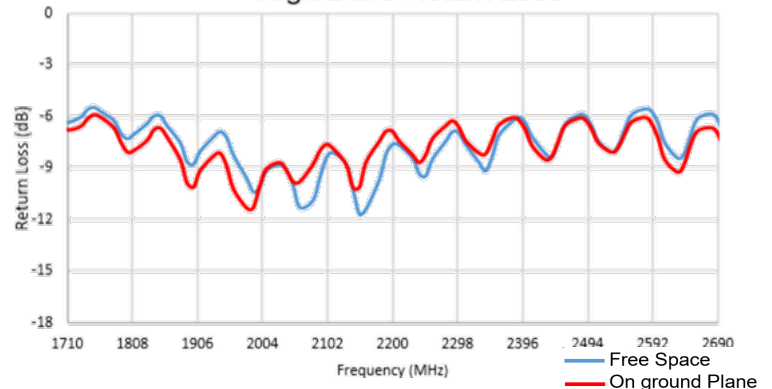


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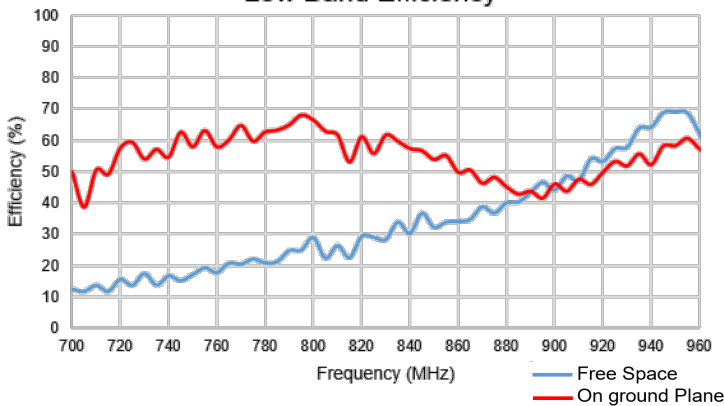
Low Band Return Loss



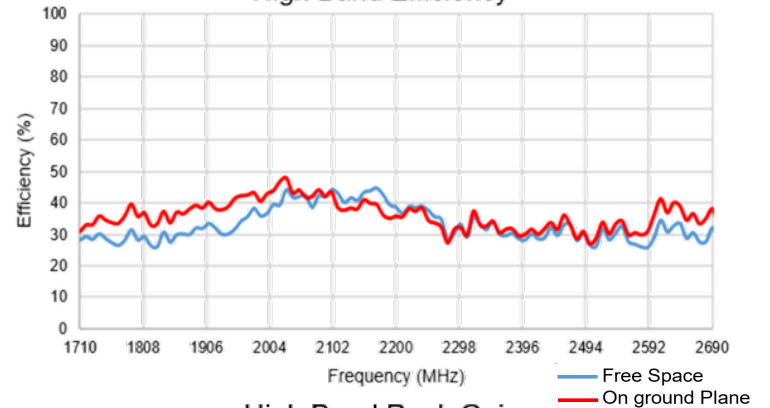
High Band Return Loss



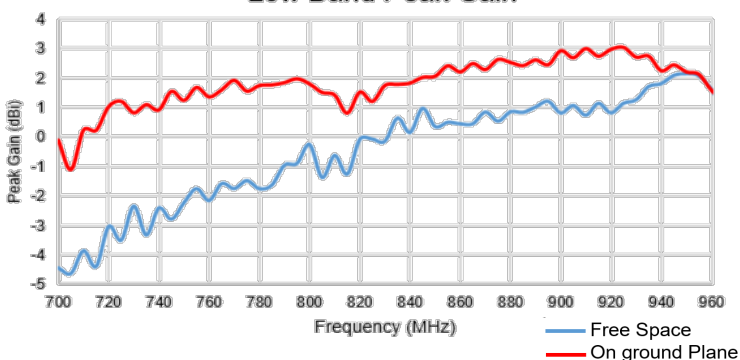
Low Band Efficiency



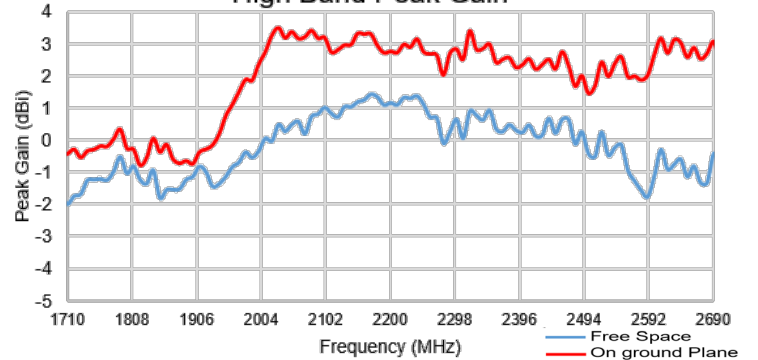
High Band Efficiency



Low Band Peak Gain



High Band Peak Gain



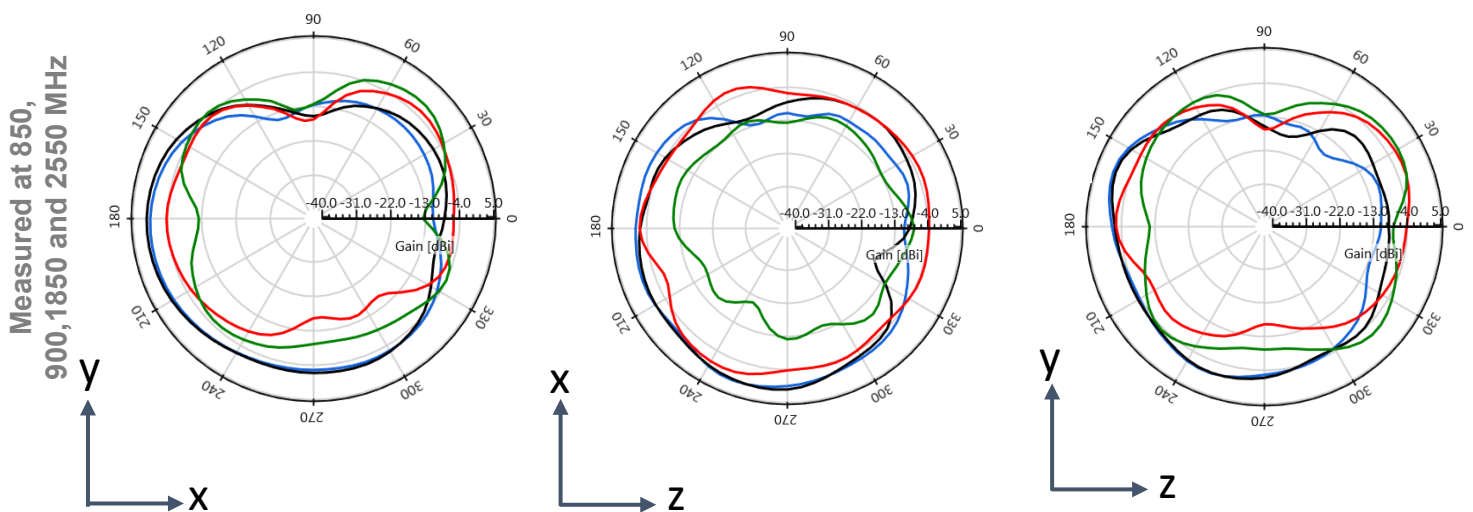
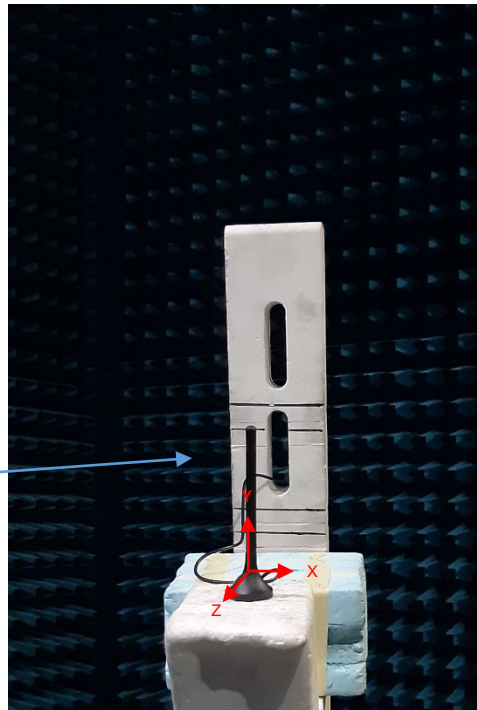
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Radiation Patterns Plots

Typical performance measured in Free Space
 Measured at 850, 900, 1850 and 2550 MHz

Free Space

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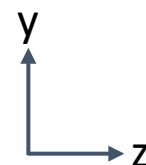
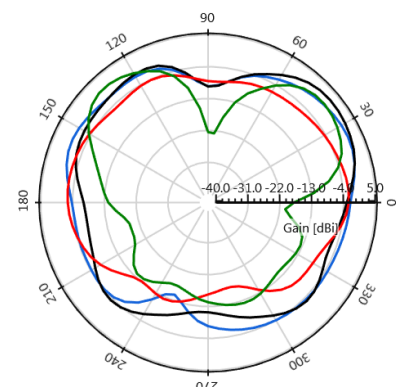
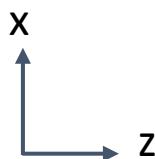
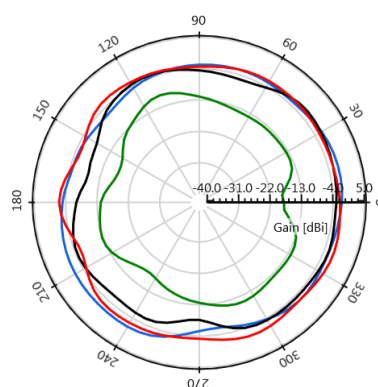
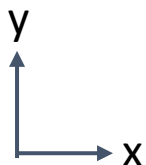
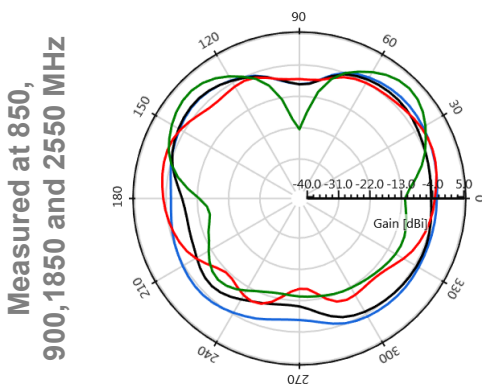
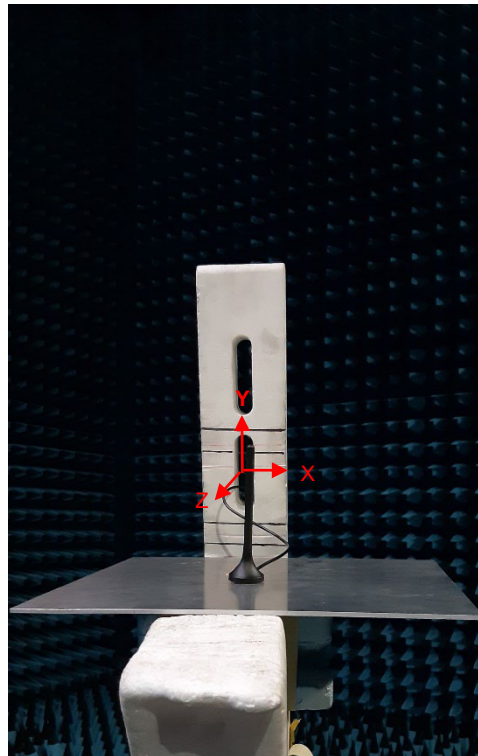


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Radiation Patterns Plots

Typical performance measured on 300 x 250 mm ground Plane
 Measured at 850, 900, 1850 and 2550 MHz

On Ground Plane



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Mechanical Specifications

Typical antenna dimensions in mm

| Part Number | A (mm) | Ø (mm) | Connector |
|----------------------|--------|--------|-----------|
| X9001248-4GMSMB1000R | 112.0 | 29.0 | SMA Male |

