Part No. X1005243-LGA2SA10A1

GPS/GLONASS (active) & LTE 2-in-1 External Antenna

(1575 / 1602) MHz + (698-960; 1710-2170; 2300-2690) MHz

Supports: Tracking, Smart Home, Agriculture, Automotive Aftermarket, Healthcare, Digital Signage, Logistics, Industrial Devices

GPS/GLONASS (active) & LTE External Antenna

(1575 / 1602) MHz
(698-960; 1710-2170; 2300-2690) MHz

KYOCERA AVX's 2-in-1 GPS/GLONASS (active) and LTE external antenna delivers on the key needs of device designers for higher functionality and performance.

Electrical Specifications

Typical characteristics in free-space

Frequency (GPS-GLONASS)	1575 MHz	1602 MHz
Gain at Zenith	1.0 dBi	1.0 dBi
VSWR	2.0:1 max	
Impedance	50 Ω	

LNA Electrical Properties		
Frequency (GPS/GLONASS)	**1575 MHz**	**1602 MHz**
VSWR	2.0:1 max	
Impedance	50 Ω	
Antenna Gain (@3.3 V)	28 dB / 25 dB min.	
DC Power Input	3~5 V	
Noise Figure	2.5 dB Typ.	
Power Consumption (@ 3.3 v)	9 mA Typ.	

Frequency (LTE)	698~960 MHz	1710~2170 MHz	2300~2690 MHz
Peak Gain	2.7 dBi	1.2 dBi	2.1 dBi
Average Efficiency	35%	29%	30%
VSWR	3.7:1 max	3.7:1 max	3.0:1 max
Impedance	50 Ω		

KEY BENEFITS

Reduced Costs and Time-to Market

Standard antennas eliminate design fees and cycle time associated with a custom solution. getting products to market faster.

High Performance

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

Reliability

Products are the latest RoHS & REACH version compliant.

APPLICATIONS

- Remote Monitoring
- Point of Sale
- IoT
- Gateway
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- Logistics
- Energy
- Retail

GPS/GLONASS (active) & LTE 2-in-1 External Antenna Specifications.
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

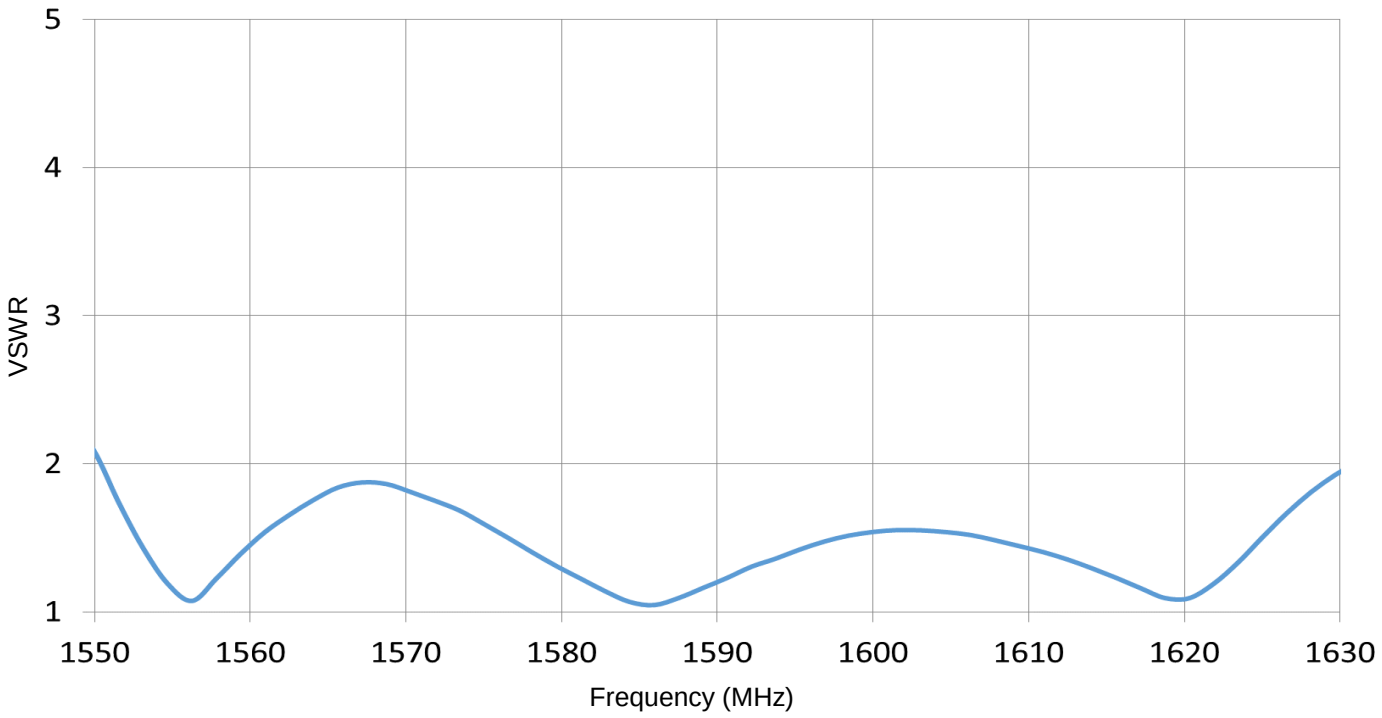
Mechanical Specifications

Ordering Part #	X1005243-LGA2SA10A1
Dimensions (mm)	51.4 (Diameter) x 10.5 (Height)
Mounting Type	Foam Adhesive
Operating Temperature °C	-40 ~ +85
Housing Material & Color	PC (Black)
Cable	Length: 1M Type: RG-174
Connector	GPS-GLONASS SMA(M) LTE SMA(M)
Waterproof	IPX5

VSWR Plots (GPS/GLONASS 1575 &1602 MHz)

Typical characteristics in free-space

VSWR:



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GPS/GLONASS (active) & LTE 2-in-1 External Antenna Specifications.
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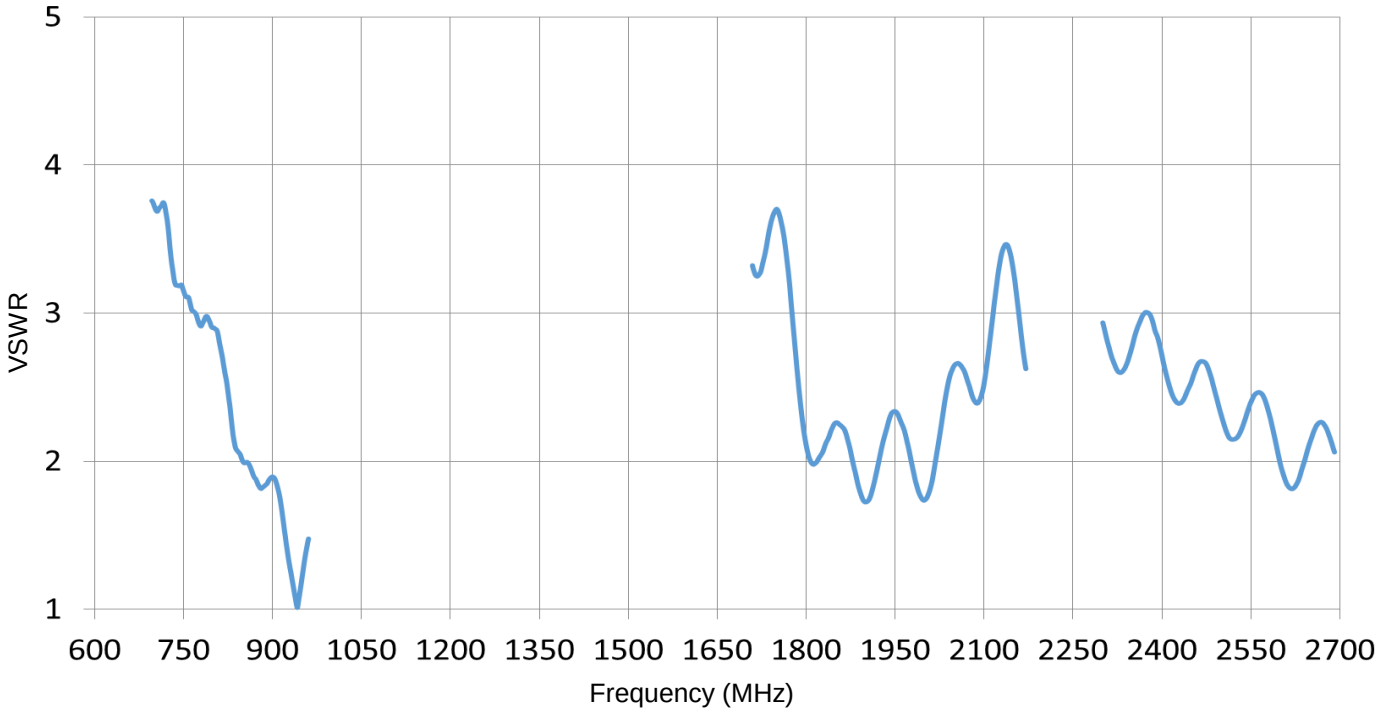
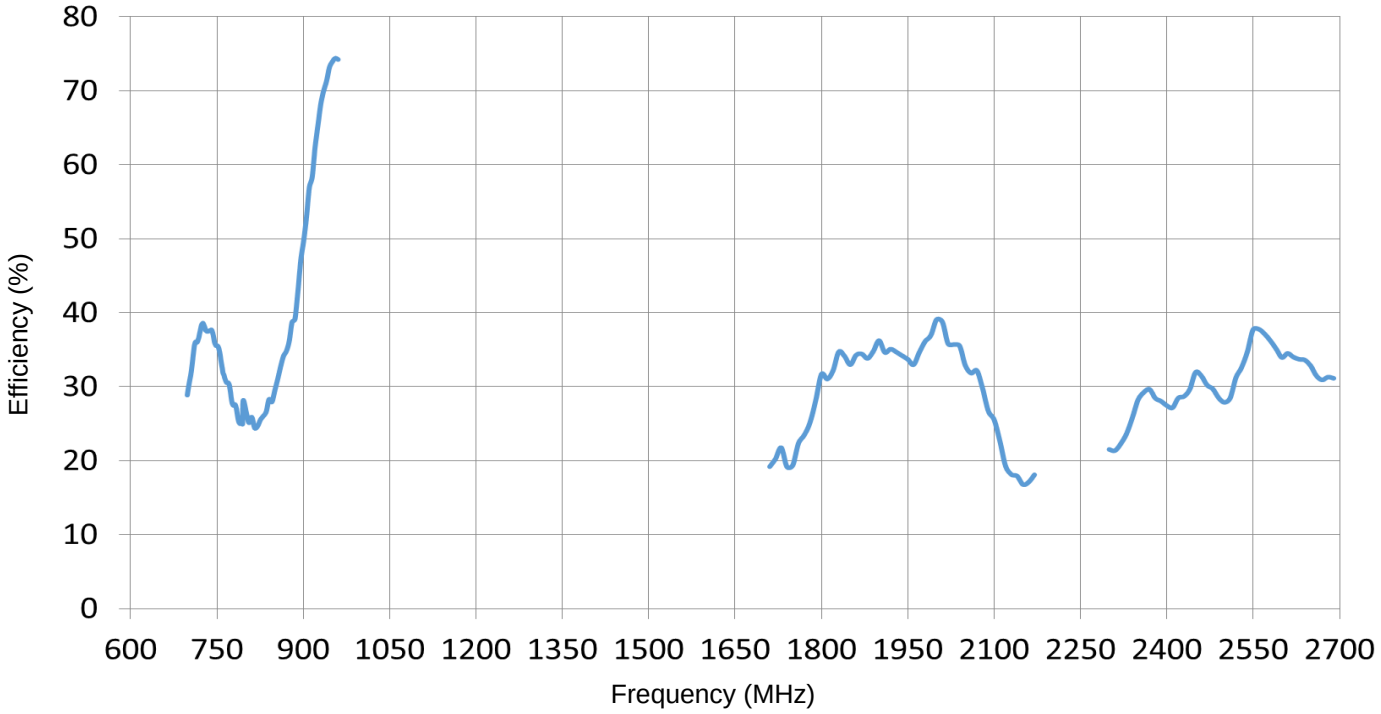
VSWR, Efficiency Plots (LTE 698-2690 MHz)

Typical characteristics in free-space

VSWR:



Efficiency:



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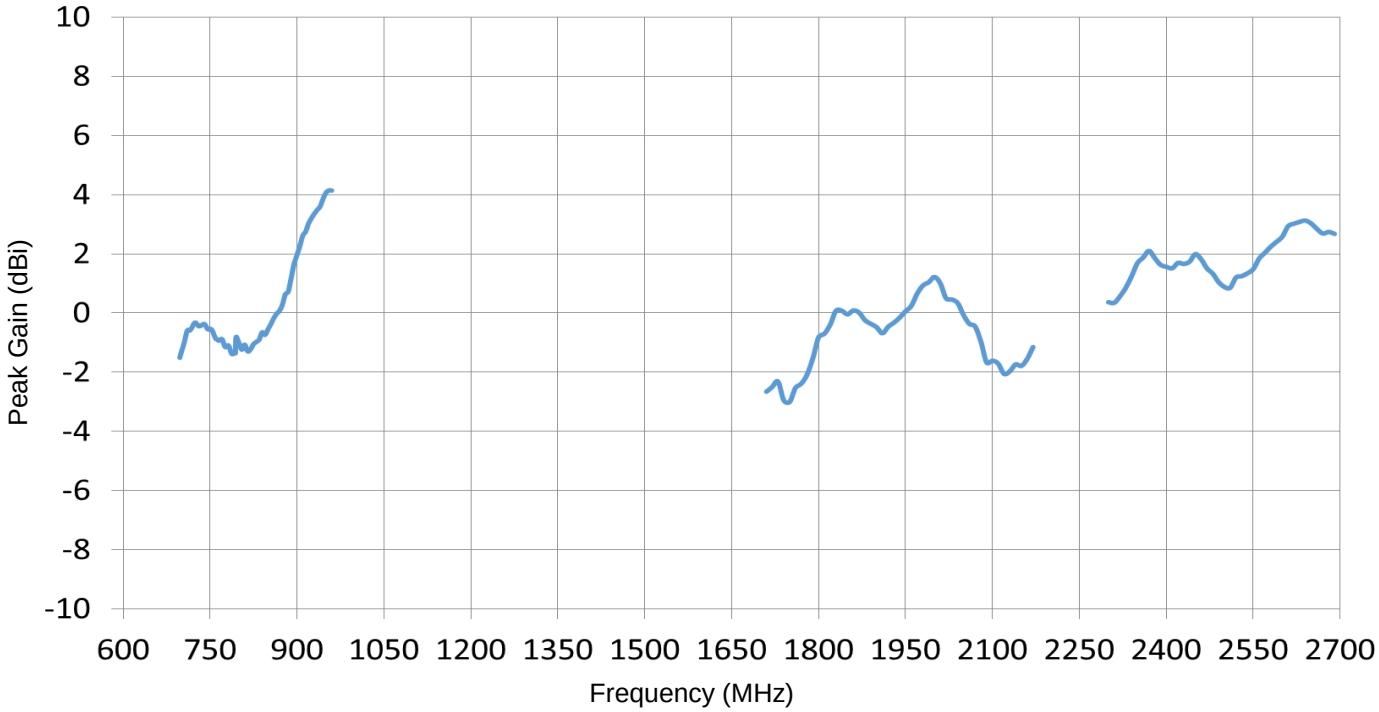
Peak Gain Plots (LTE 698-2690 MHz)

Typical characteristics in free-space

Peak Gain:



GPS/GLONASS (active) & LTE 2-in-1 External Antenna Specifications.
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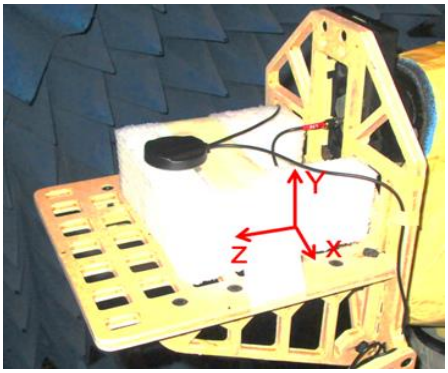
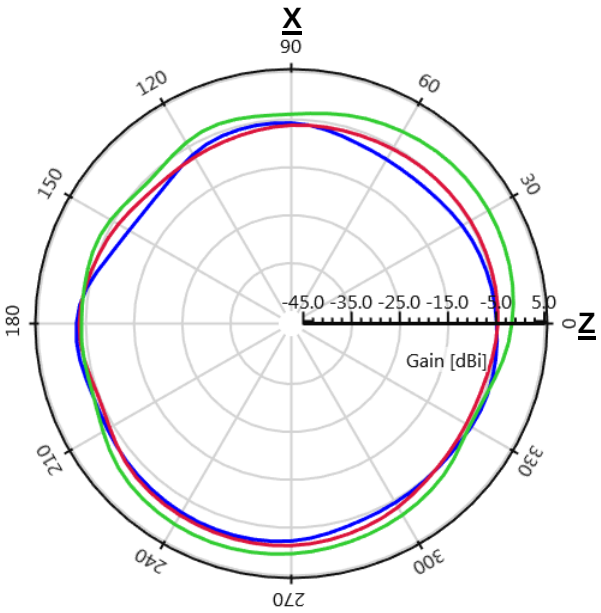
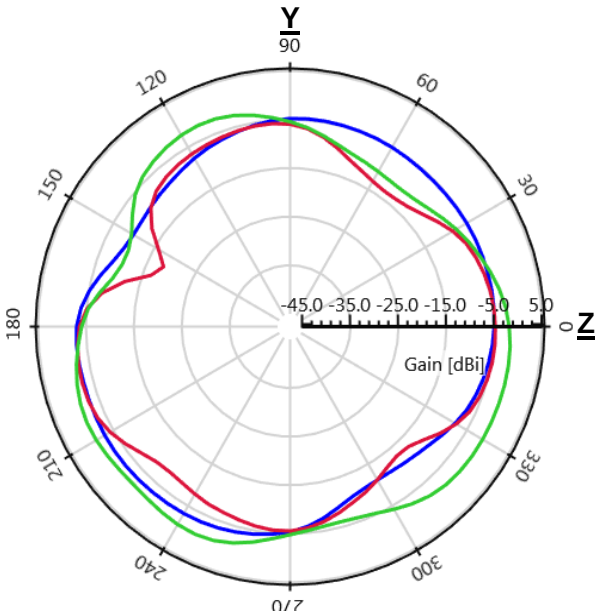
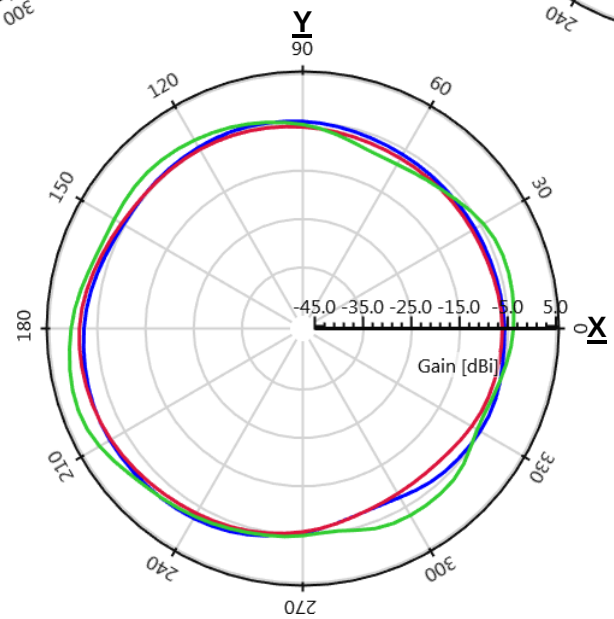
2D Radiation Patterns (LTE 698-960 MHz)

Typical characteristics in free-space









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GPS/GLONASS (active) & LTE 2-in-1 External Antenna Specifications.
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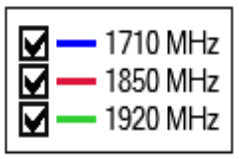
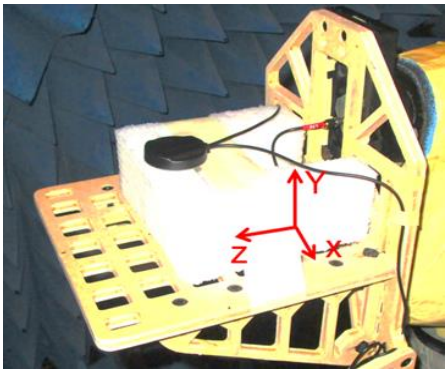
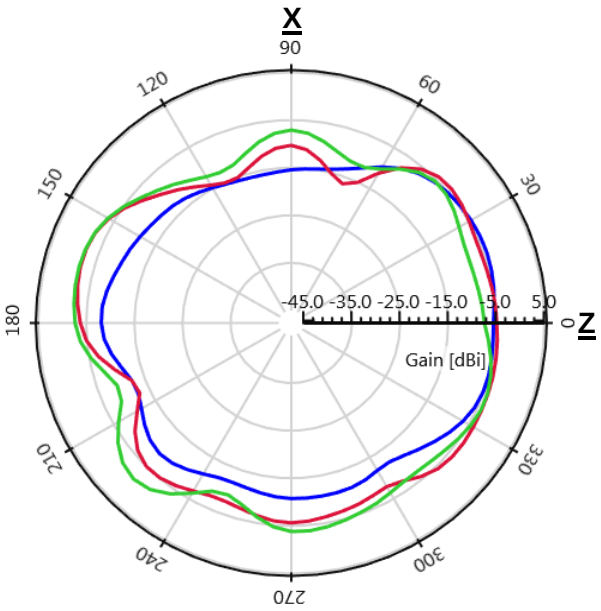
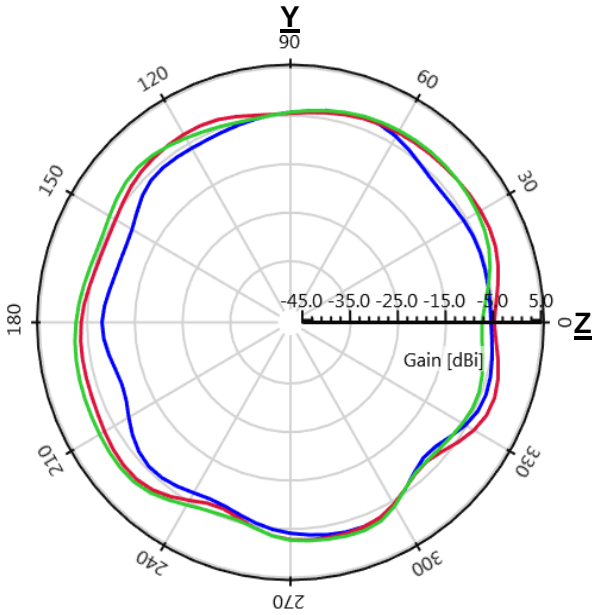
2D Radiation Patterns (LTE 1710-2170 MHz)

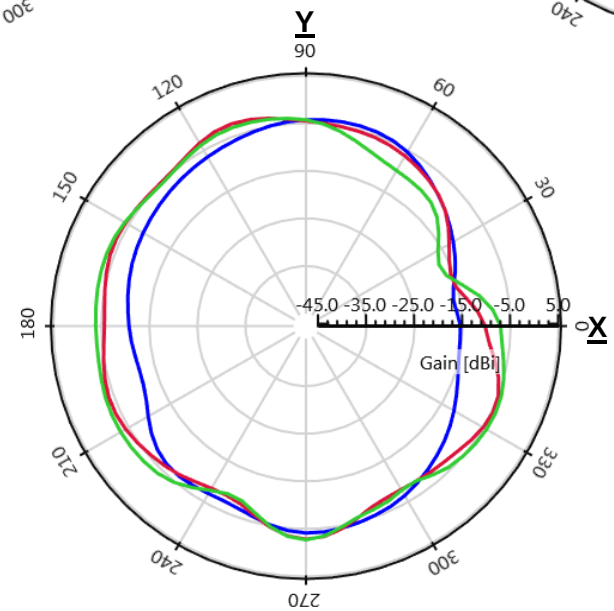
Typical characteristics in free-space











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GPS/GLONASS (active) & LTE 2-in-1 External Antenna Specifications.
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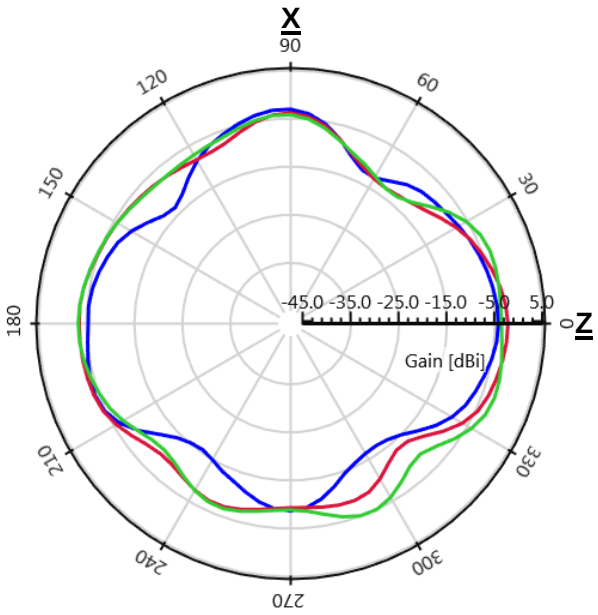
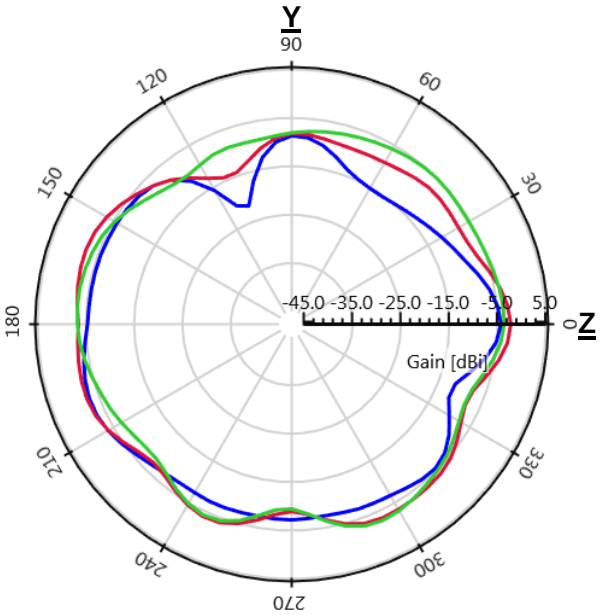
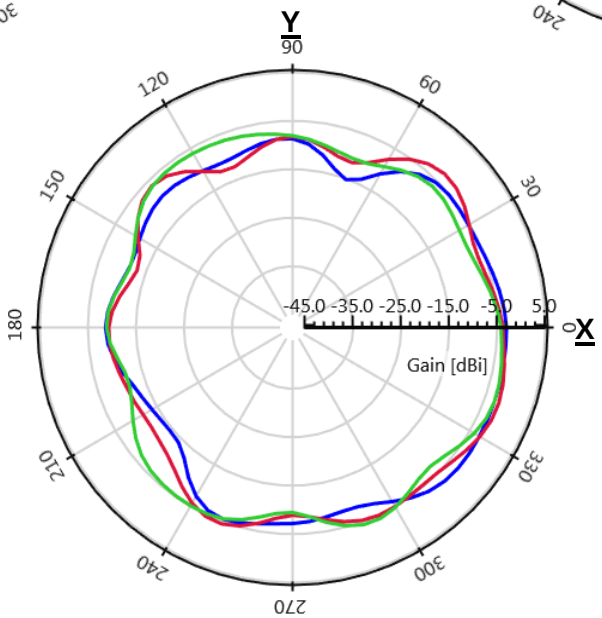
2D Radiation Patterns (LTE 2300-2690 MHz)

Typical characteristics in free-space







GPS/GLONASS (active) & LTE 2-in-1 External Antenna Specifications.
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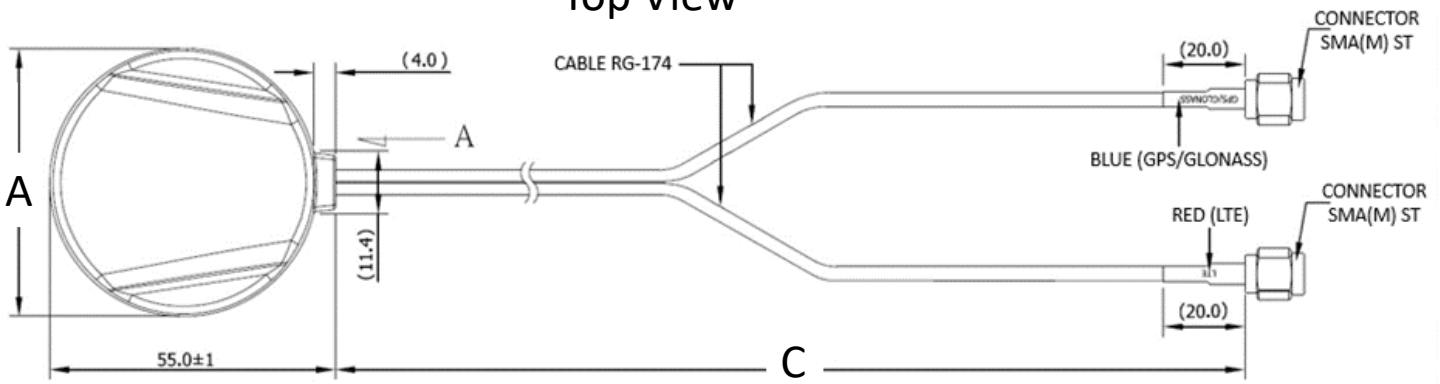
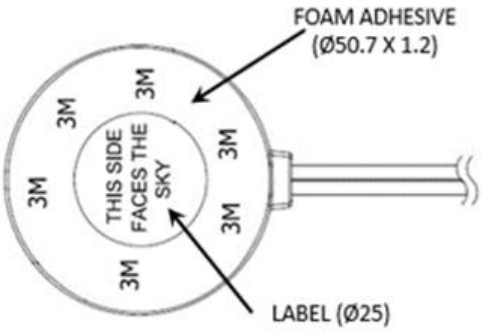
Mechanical Dimensions

Typical antenna dimensions (mm)

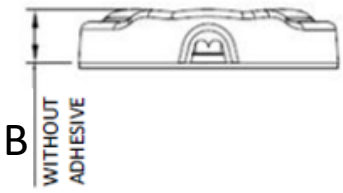
Part Number	A (mm)	B (mm)	C (mm)
X1005243-LGA2SA10A1	51.4 ± 0.3	10.5 ± 1.0	1000 ± 40.0

Top View





Bottom View



Side View