TECHNICAL DATA SHEET

Description: 28dBi GNSS Mag Mount Antenna, Coax Feed

Series: GNSS Active Antenna

PART NUMBER: GNSSMMSMA



Features:

- Frequency 1559-1606 MHz
- Antenna Gain 1/2.4/3.5 dBic
- Polarization RHCP
- LNA Gain 28dB
- Current consumption 9mA
- Cable RG-174 with SMA Male
- RoHS Compliant

Applications:

- GPS, Glonass, Beidou
- Navigation
- Location Based Services
- Fleet management
- Asset tracking
- Indoor/Outdoor – IP67

All dimensions are in mm / inches

Issue: 1914

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A YAGEO Company

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ELECTRICAL SPECIFICATIONS

Antenna Type	Patch
Frequency	1559-1563/1574-1577/1598-1606MHz
Nominal Impedance	50 Ω
VSWR of Antenna	2.5/2/2 Max
Radiation Pattern	Omni
Antenna Gain	1/2.4/3.5 dBic
Efficiency	55%/65%/85%
Polarization	RHCP
VSWR of LNA	2 Max
LNA Gain	28 dB Min
DC Power Input of LNA	3~5 Vdc
Noise Figure	1.1 dB Typ.
Power consumption(@3.3V)	9 mA Typ.

MECHANICAL SPECIFICATIONS

Overall Length	35.2 x 44 x 14.5 mm
Weight	68.39 g
Antenna Color / Material	Black/PC+ABS
Connector type	SMA Male
Cable type	RG-174
Cable length	3000 mm
Mounting Method	Magnet

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 ~ +85° C
Storage Temperature	-40 ~ +85° C
Ingress Protection	IP67
RoHS Compliant	Yes

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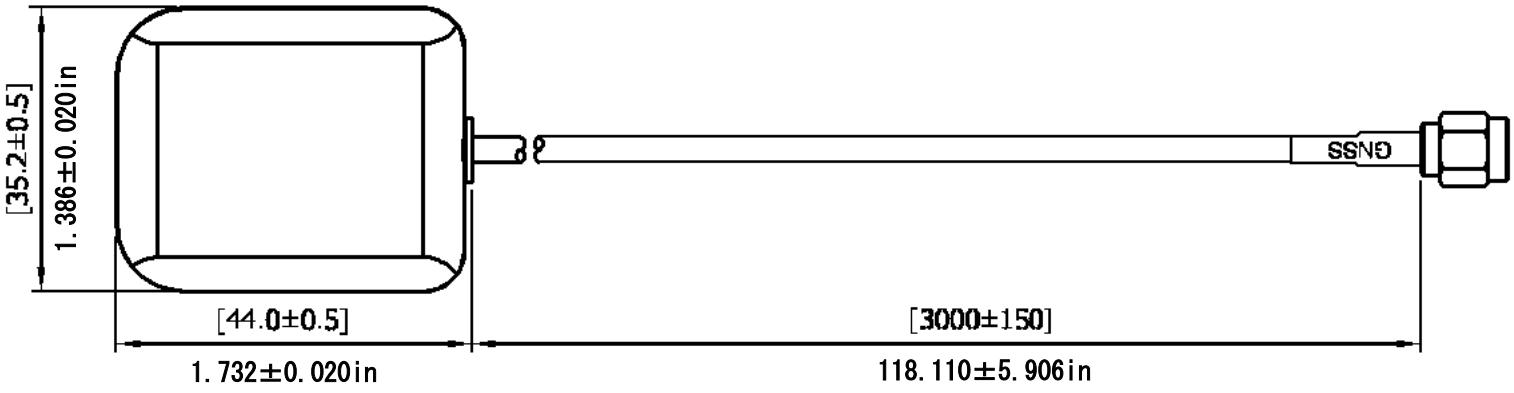
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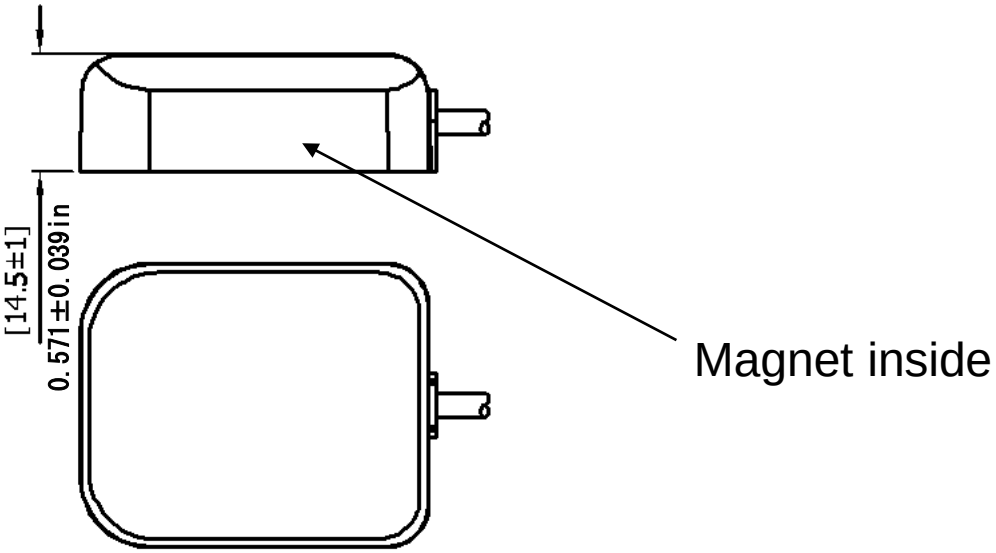
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MECHANICAL DRAWING





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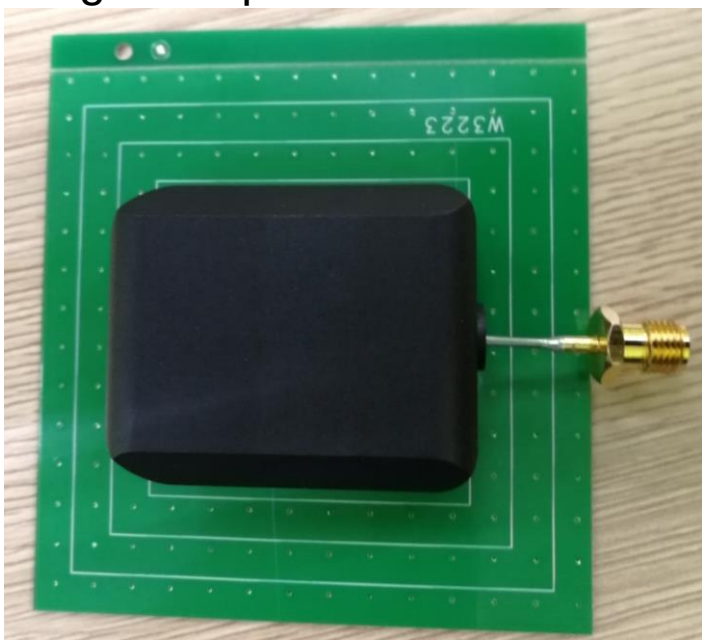
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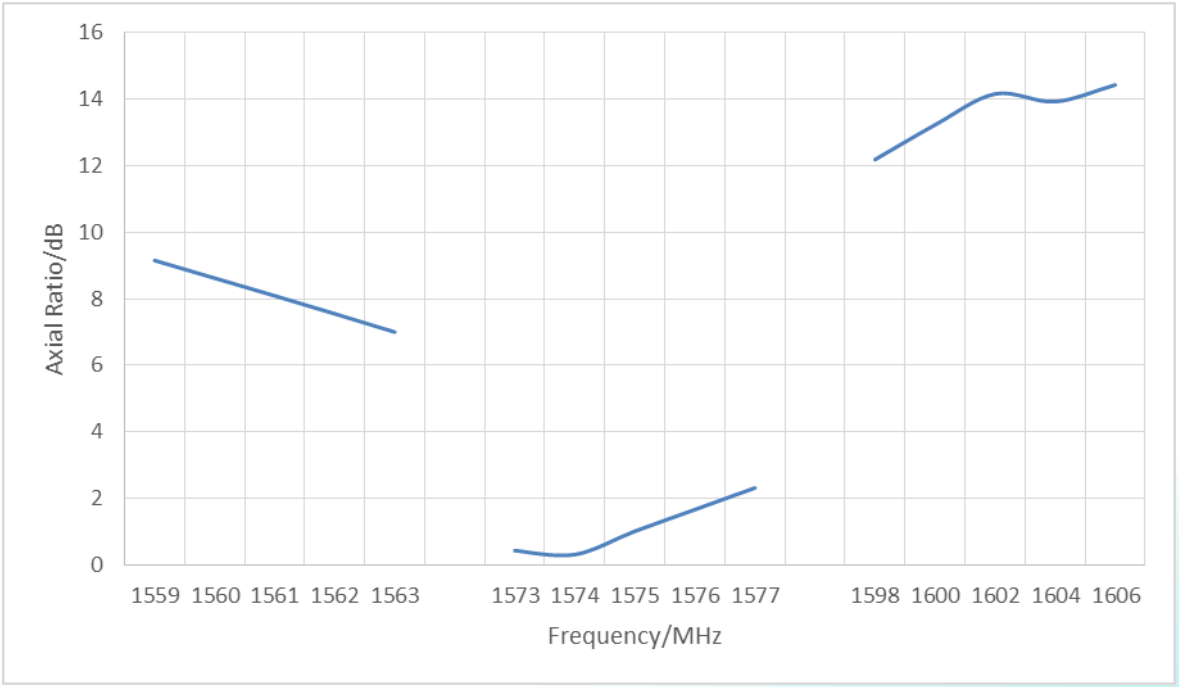
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TEST SETUP OF ANTENNA

Test with 70*70mm ground plane.



Axial Ratio vs Frequency



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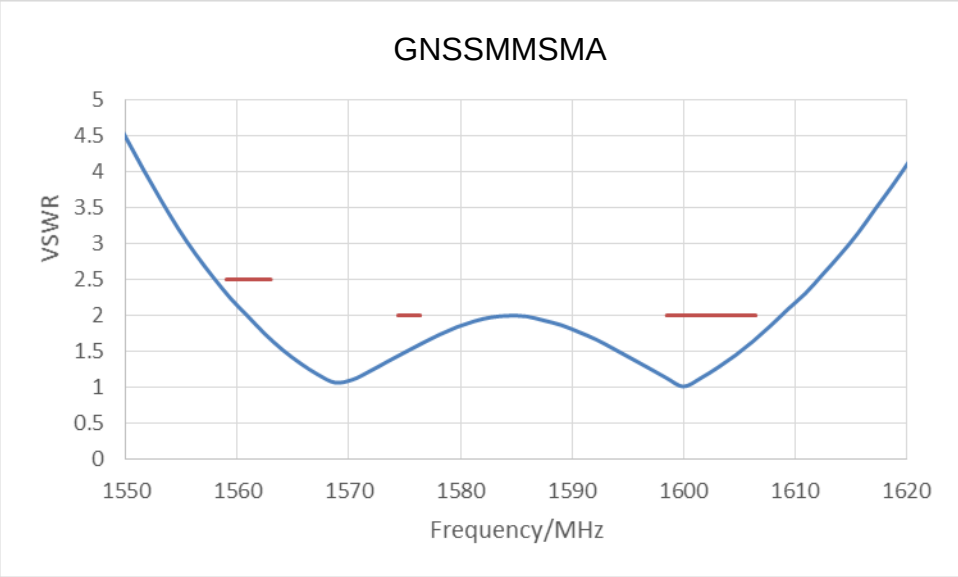
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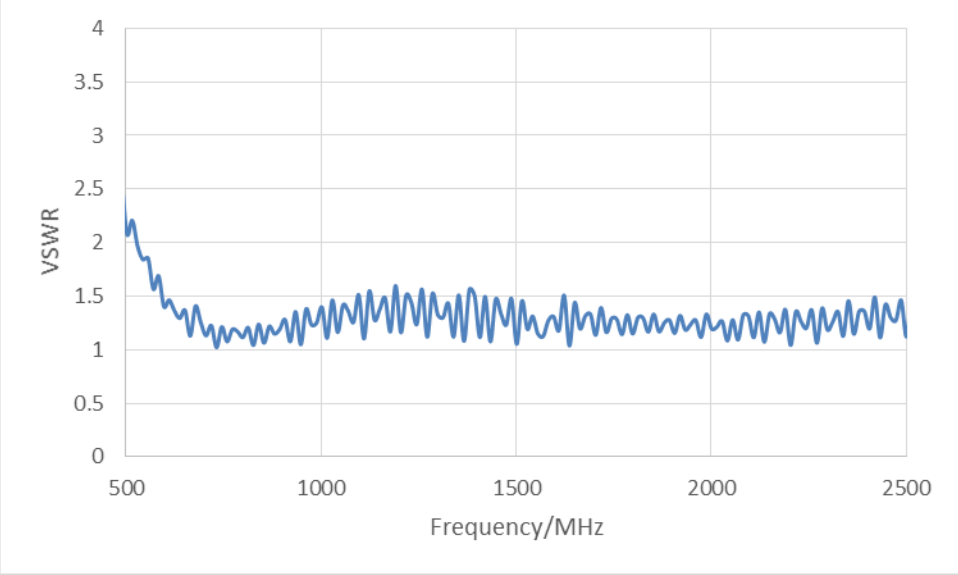
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CHARTS

VSWR of Antenna vs Frequency



VSWR of LNA vs Frequency



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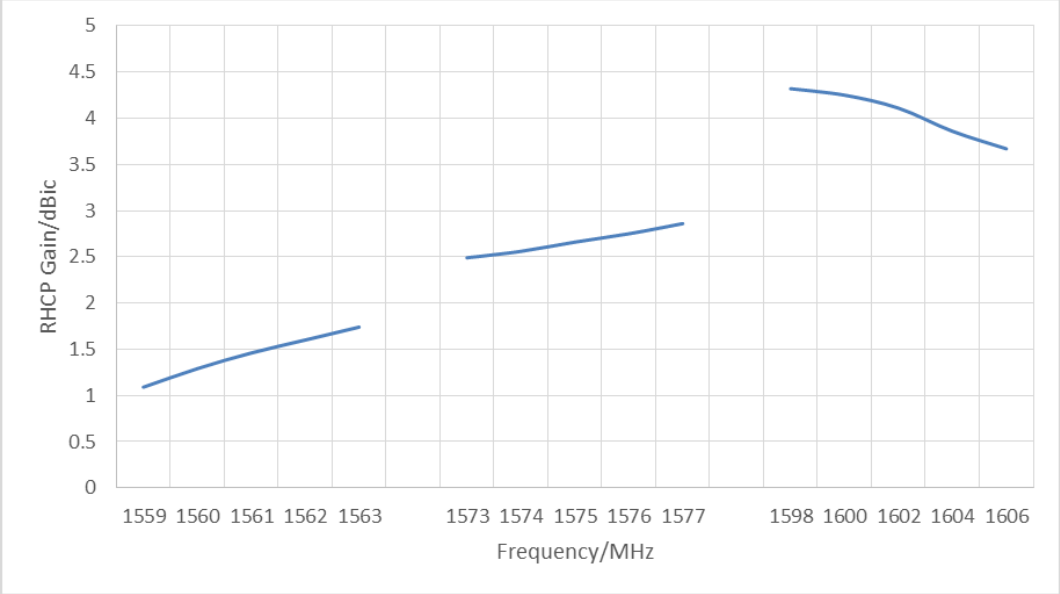
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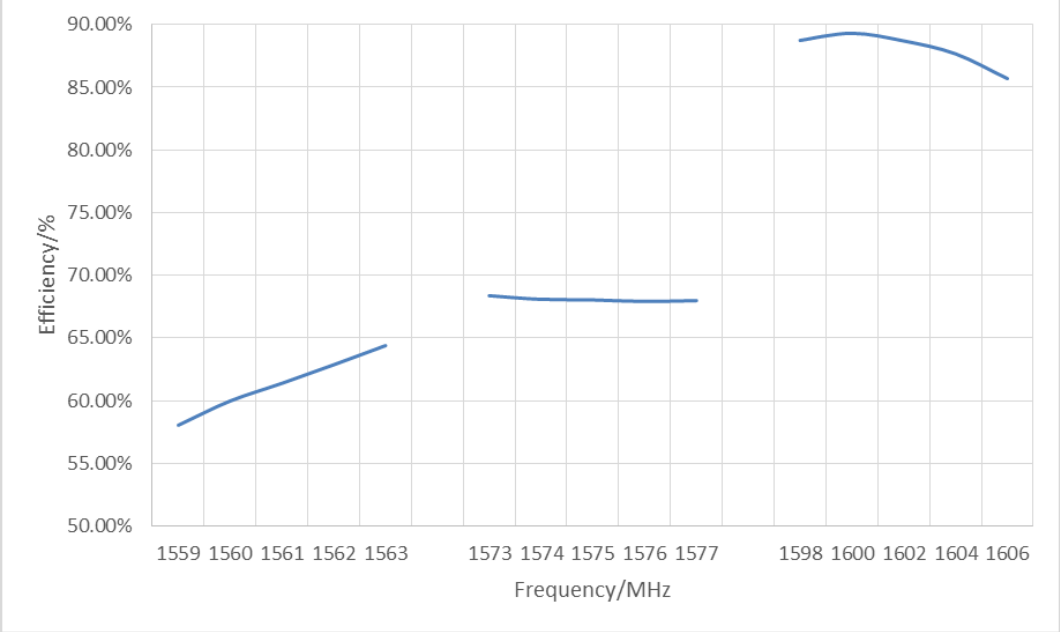
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CHARTS

RHCP Gain vs Frequency



Radiation Efficiency vs Frequency



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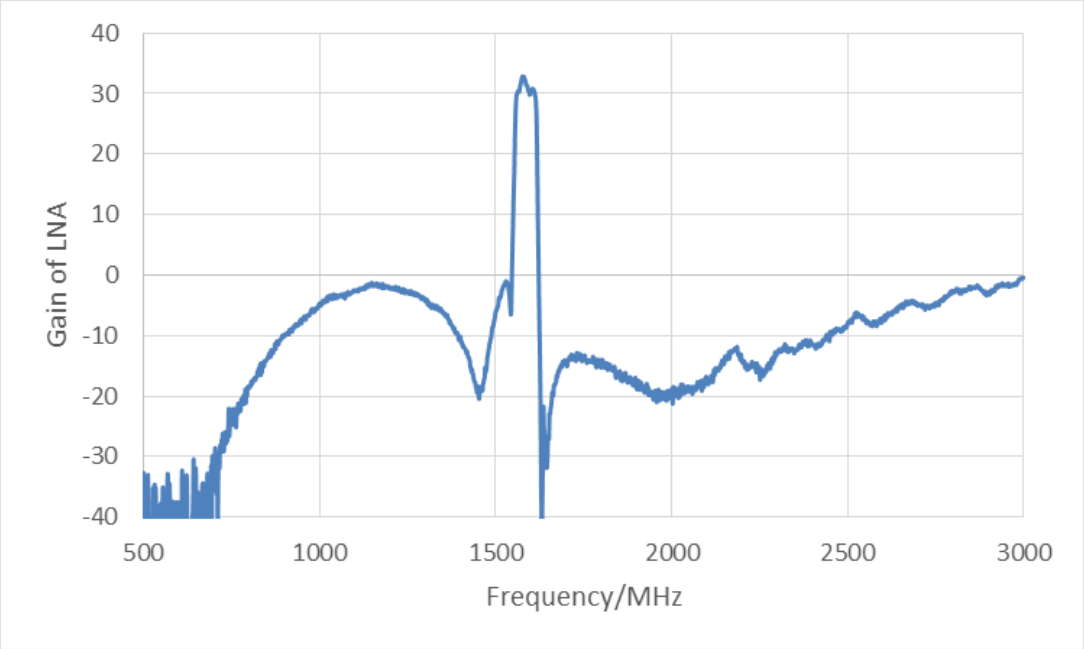
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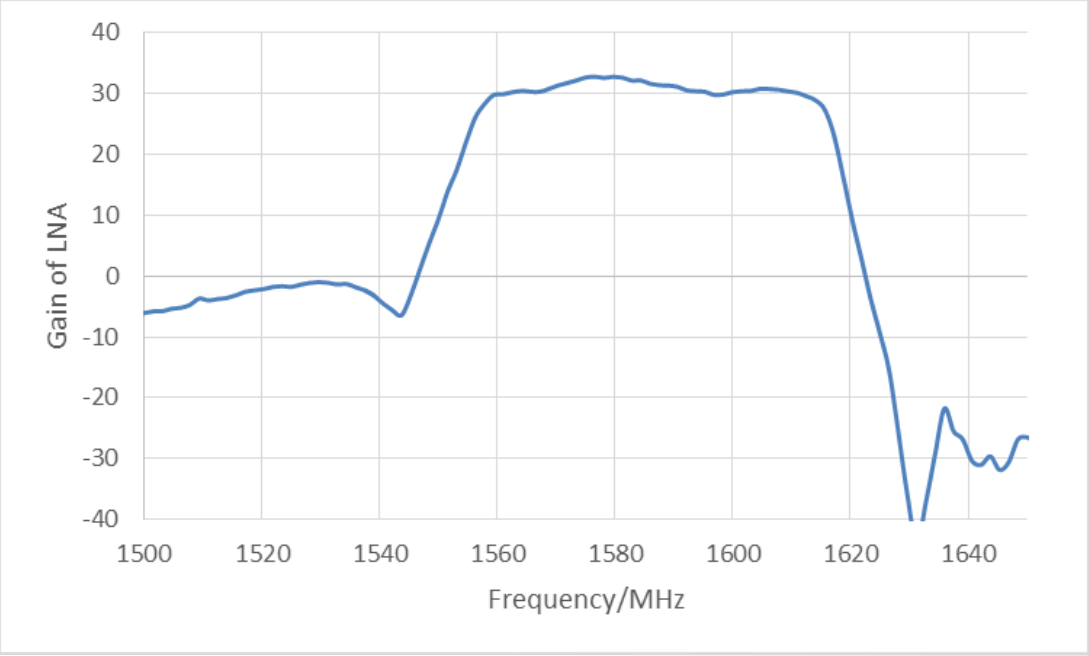
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CHARTS

Gain of LNA vs Frequency





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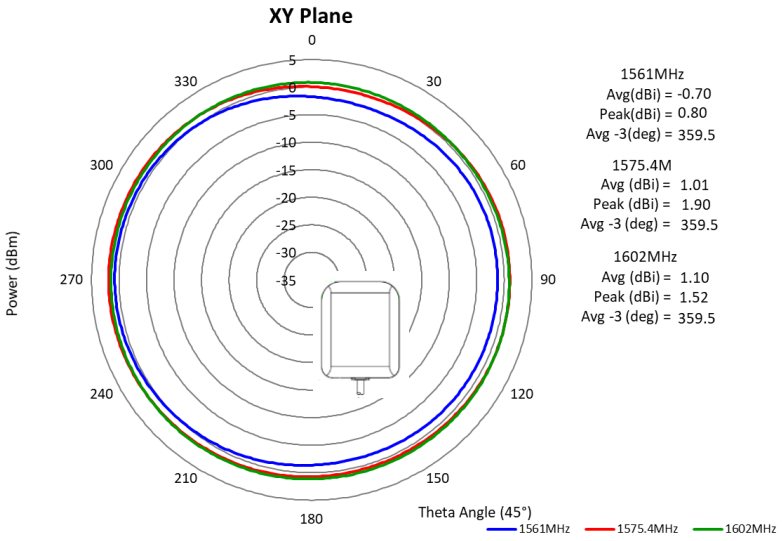
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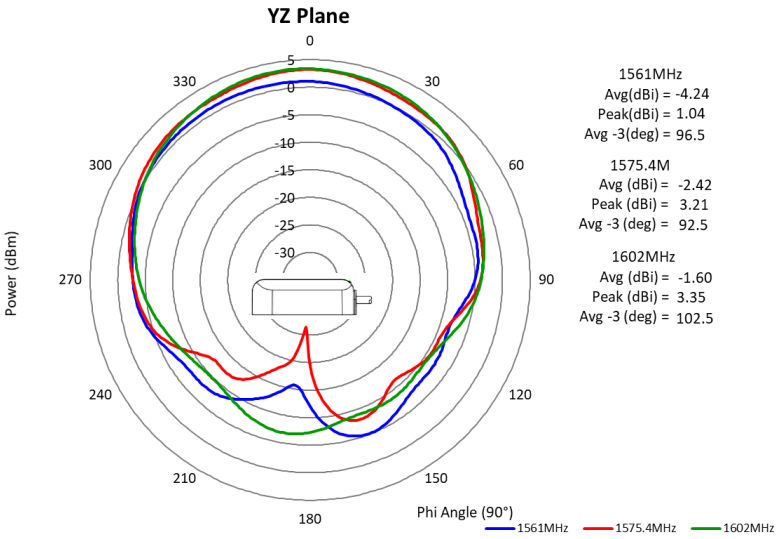
CHARTS

Radiation Pattern of BD,GPS and GLONASS

Horizontal Plane (Theta=45°)



Elevation Plane (Phi=90°)



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PACKAGING

1 PCS / PE Bag
80 PCS / Carton

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