



# 1559-1610 MHz GNSS ACTIVE ANTENNA

Part Number: 2195891-1

## FEATURES & BENEFITS

- L1+G1 bands for GNSS
- Active External Patch Antenna
- Different cable lengths and connector options available
- No matching circuits required

## RF SPECIFICATIONS

Frequency Range (MHz)	1559 - 1610
VSWR	< 1.9:1
System Gain at Zenith @ 5V	Typ. 24.7 ~ 29.4 dBic
Axial Ratio at Zenith	Typ. 1.89 dB
Average Gain (Cable loss included)	21.51 dBic
Noise Figure	Typ. 1.4 dB @ 5V
Group Delay @ Zenith Variation Across Single Constellation(ns)	20.1
LNA (Voltage & Current)	DC Voltage Range 3.0 ~ 5.0V & 15.0 mA @ 5.0V
Power Handling	10 Watt cw
Feed Point Impedance	50 ohms
Polarization	RHCP

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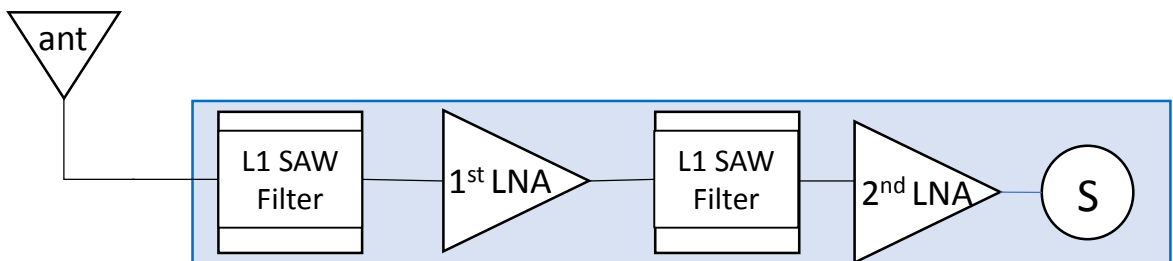
## MECHANICAL SPECIFICATIONS

Size	50.0 mm x 38.0 mm x 17.0 mm
Weight	< 68.25 g
Mounting	External chassis mounting
Mating Connector	SMA
Cable	RG-174
Operating Temperature	-40 to +85°C
Storage Temperature	-40 to +85°C
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

## OUT OF BAND ATTENUATION

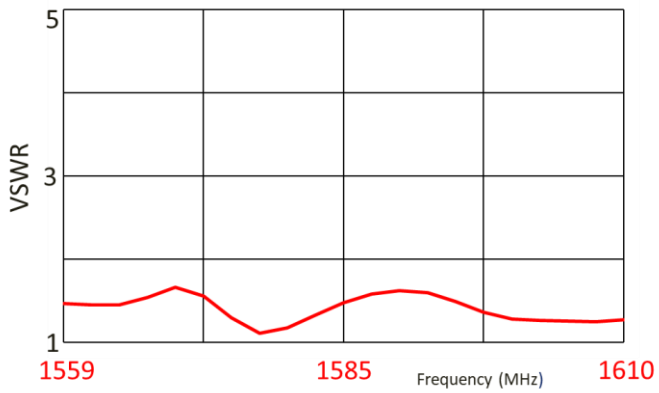
Frequency (MHz)	1459( $F_0-100$ )	1710( $F_0+100$ )
Atten. (dB)	35.32	33.15

L1 & G1  $F_0 = 1559$  MHz & 1610 MHz

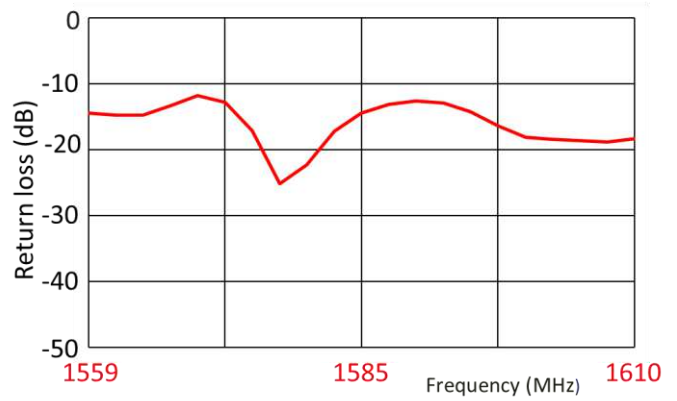


## RF DATA

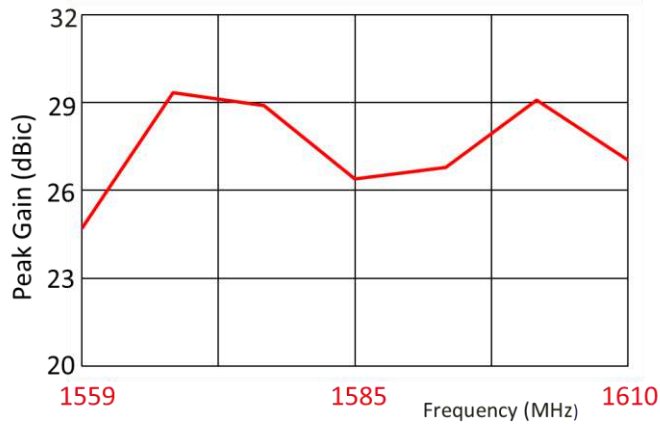
### VSWR



### Return Loss



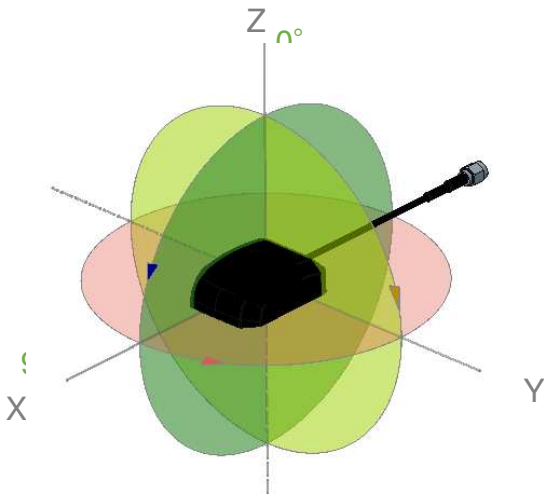
### Peak Gain



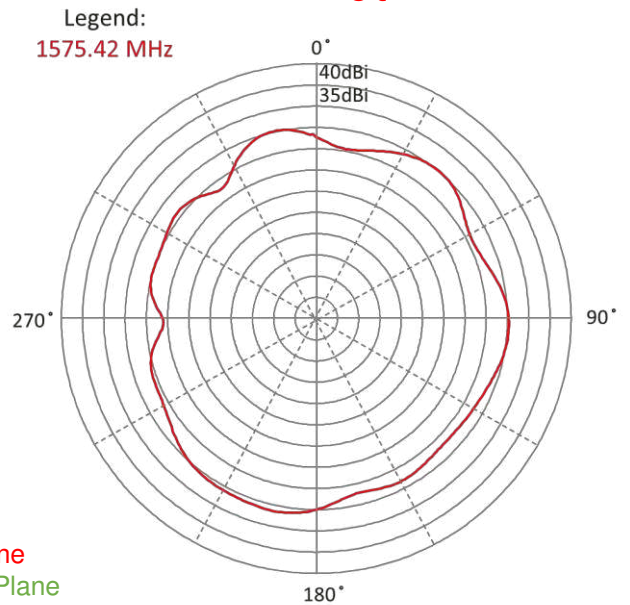
Antenna gain varies with cable length

# RADIATION PATTERN

## Test setup

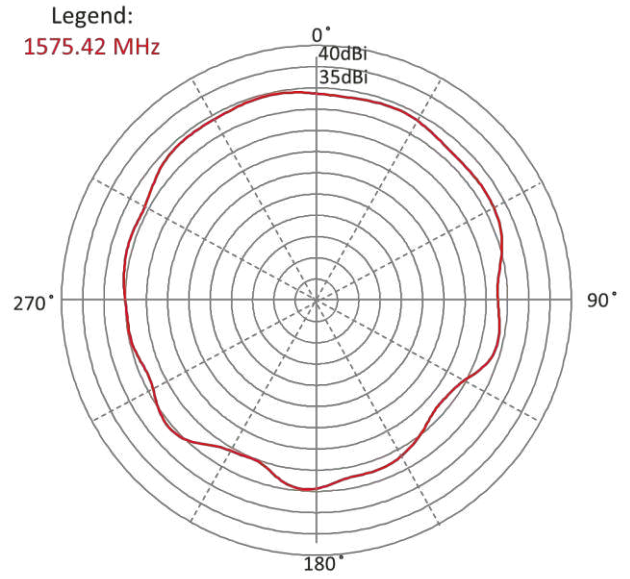
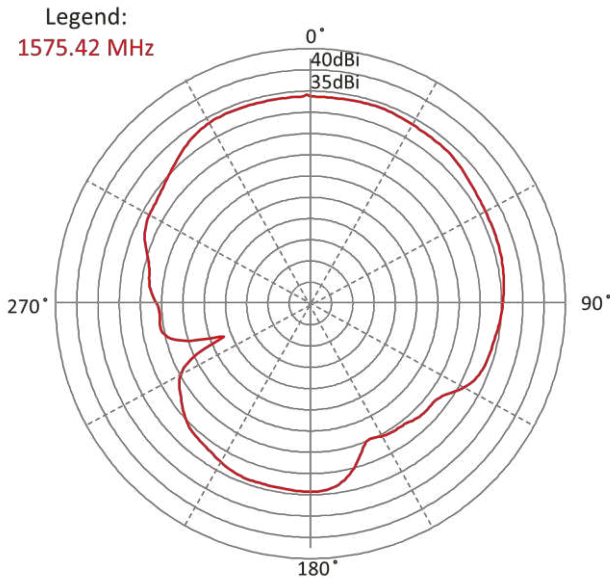


## Azimuth



## Elevation 1

## Elevation 2

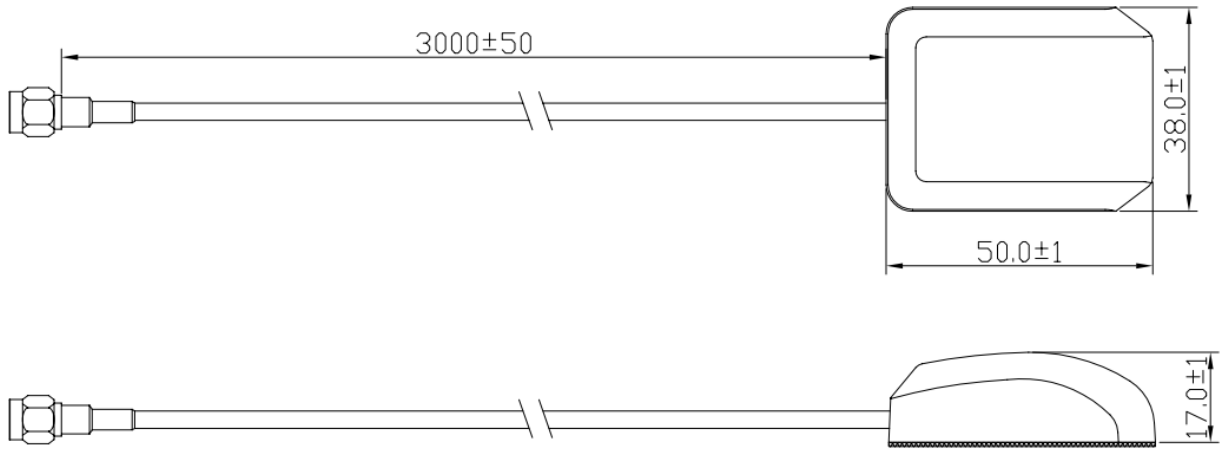


Antenna gain varies with cable length

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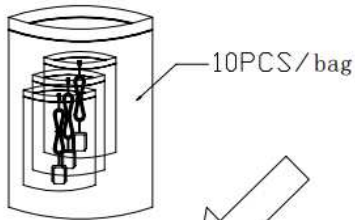
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## DIMENSIONS

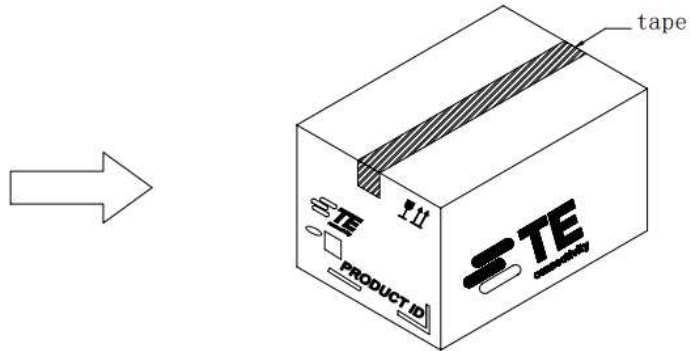
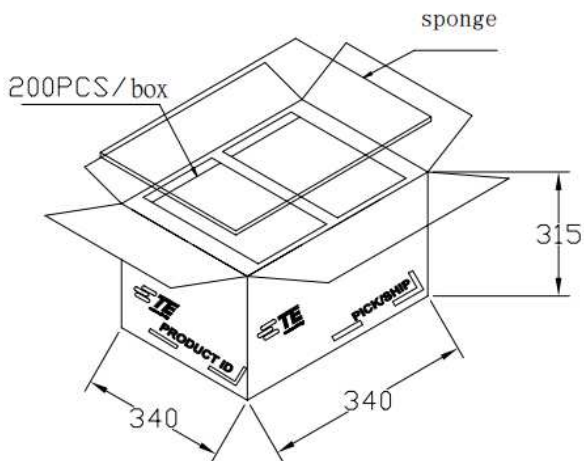


Dimensions: mm  
Diagram is not to scale

## PACKAGING



NOTES:  
THE PACKAGE MUST MEET REQUIREMENT OF STANDARD TEC-107-115



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## TE TECHNICAL SUPPORT CENTER

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