

Commodity Description	Specification
GNSS ACTIVE ANT/LP-105A-C	RG174/3M/3~5V/SMA



1. Application

This application shall apply for antenna unit which shall be used with an engine for an engine for an automobile. (For impedance 50Ω)

2. Appearance

Antenna Unit (with radome , connector , and cable – referring to the attached drawing)

Dimensions 50*55*17 mm (circular)

Color Black

3. Operating Condition

Temperature -40 to +80 °C

Humidity 90% RH

4. Storage Condition

Temperature -45 to +85 °C

Humidity 90% RH

5. Electrical Specification:

5.1 Passive Antenna

Characteristics	Specification			
Working Frequency ⁽¹⁾	1575MHz±3	1176MHz ±3	1602MHz ±3	1561MHz ±3
Bandwidth (10dB return loss)	10 MHz typical			
Gain at Zenith	2dBi			
Polarization	R.H.C.P.			
Axial Ratio	< 3.0 dB typical			

Note 1: Working frequency will be offset to another working frequency according to the conditions of user's ground plane and radome.

5.2 LNA

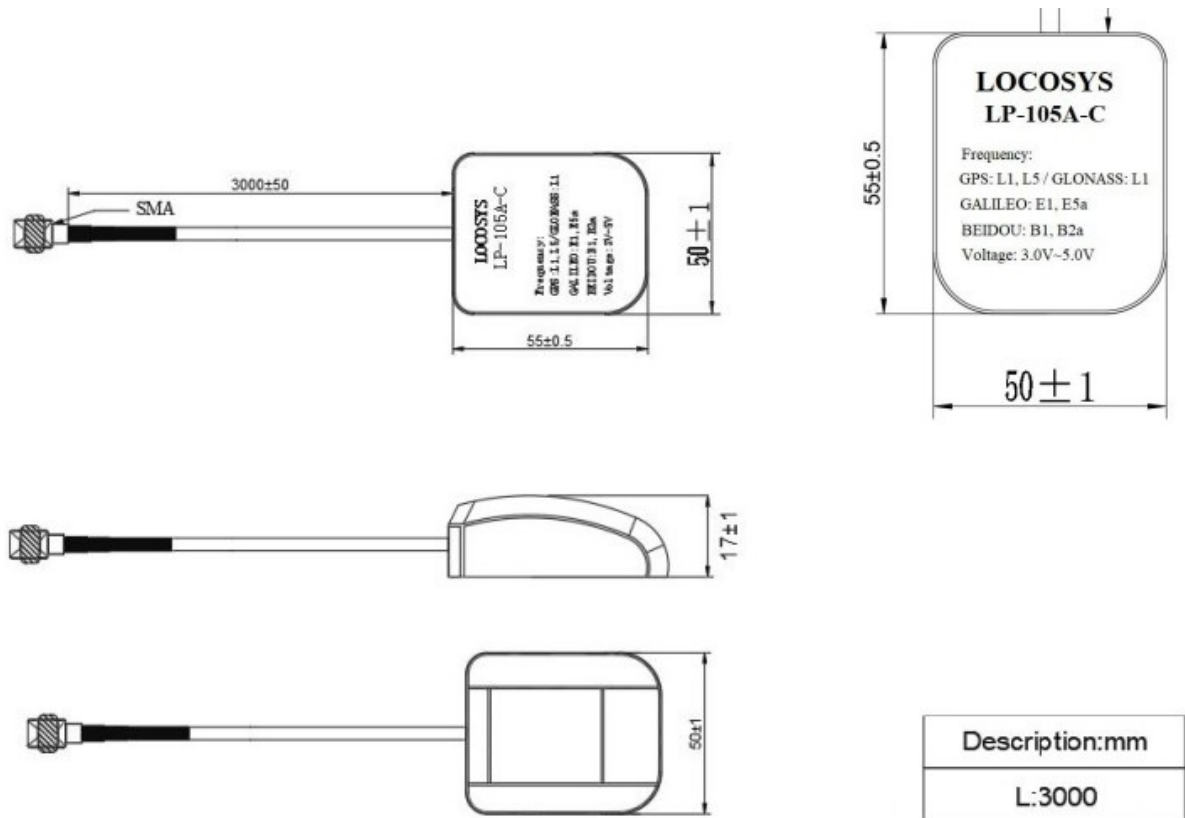
Characteristics	Specification
Gain	24 dB ± 2 dB
Noise Figure	<1.5 (dB)
Output V.S.W.R	2.0 max
Voltage	DC = 3.0~5.0V
Current	<40mA

Note 1: All value are defined at 25±15 °C ,65±20 % RH, power handling 1 w, air pressure 960 ±10 HPA unless otherwise noted.

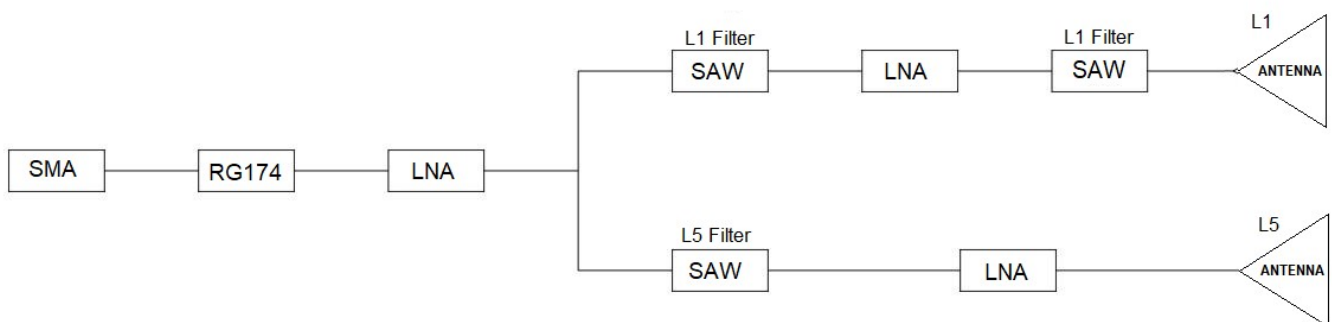
Note 2: Patch characteristics are measured with 70x70 mm ground plane in an anechoic chamber.

6. Dimensions of Antenna:

6.1 Internal dimensions : (unit:mm)

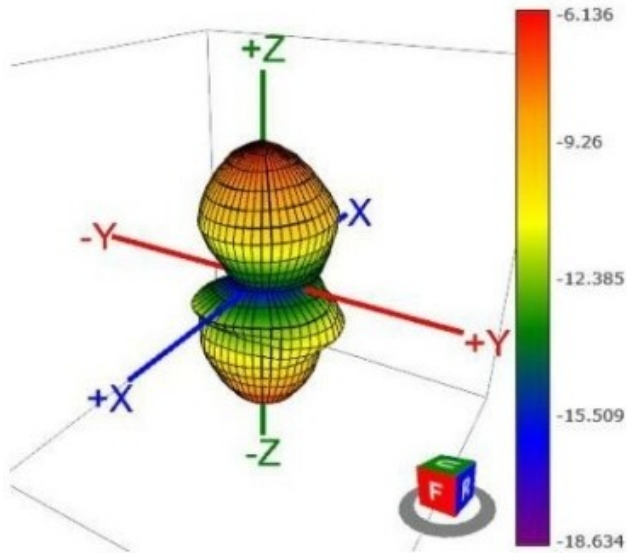


7. Block Diagram

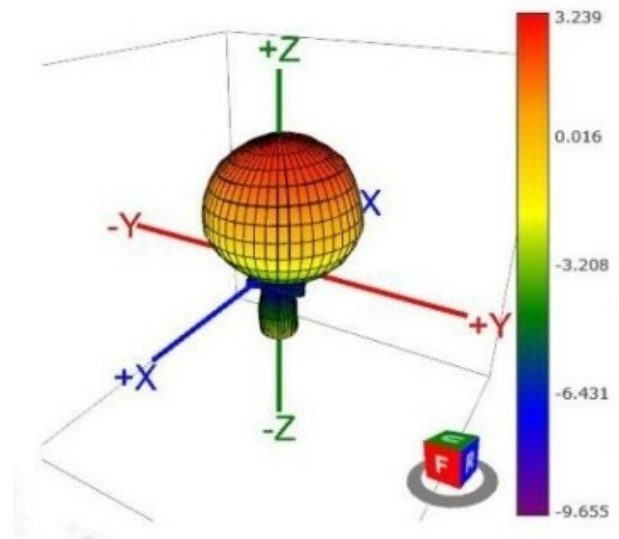


8. 3D Radiation Pattern

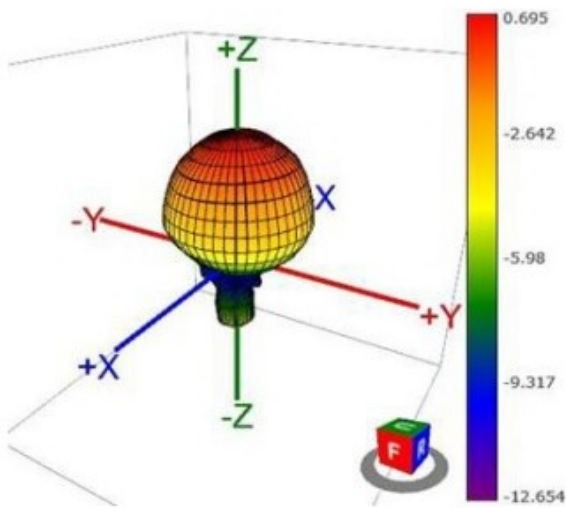
1176 MHz



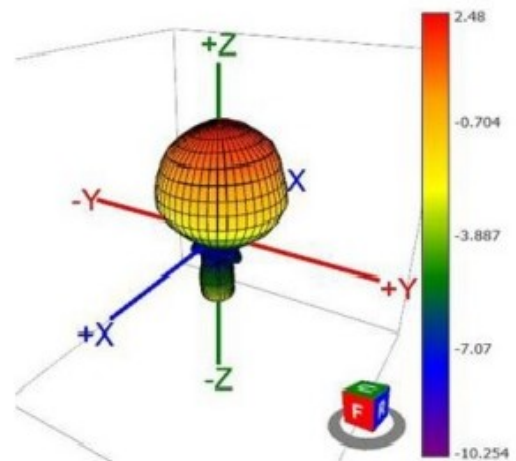
1561 MHz



1602 MHz



1575 MHz



9. Packing

1pc per PE bag as below

