

ALLISCOM

GNSS Active Antenna

Data Sheet



Model No.	SG25C
Features	High performance for GPS/ BDS/ GLONASS/Galileo Right hand circular Polarization (RHCP) Low Axial Ratio (< 3dB) for full band Low Noise Figure < 1.5dB Waterproof Housing Magnetic Mounting RoHS Compliant
Description	The SG25C is a high performance and quality antenna for GPS/GLONASS/BDS/Galileo navigation. The antenna features high efficiency and meet L1 band of the GPS/GLONASS/BDS/Galileo performance standards. The RF connector and cable length can be customized as required.

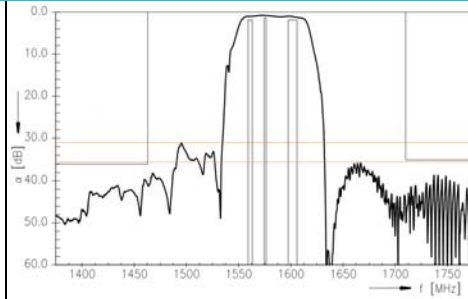
1. Antenna Performance

1.1 Performance

Patch Antenna:

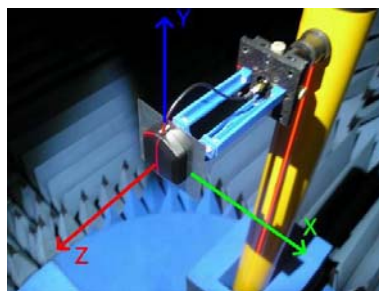
Frequency	1555~1615MHz
VSWR	2.0:1 max.
Axial Ratio	3dB max. 1540~1620MHz
Polarization	RHCP
Impedance	50Ω
Power Heading	1W

LNA Module:

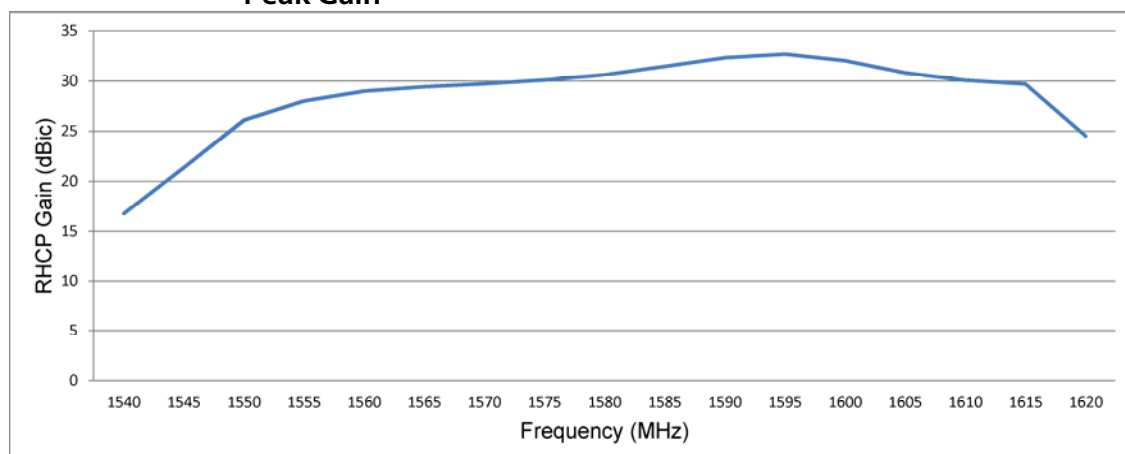
Noise Figure	1.0dB typical , 1.5dB max. See Page 3
Gain	30dB typ. (@ 70x70mm grounding)
Filtering (typ.) See Pag.4	1500MHz < <-25dB 1530MHz -- -30dB 1630MHz -- <-15dB 1640MHz -- -54dB 1660MHz > <-30dB 
DC Voltage	2.7~5.5V
DC Current	12~16mA

Note: Specifications subject to change without notice.

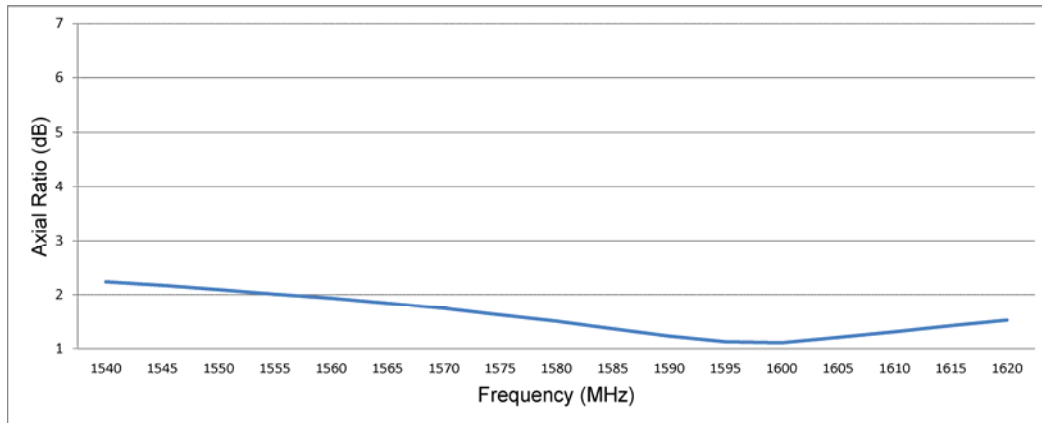
1.2 Antenna Measurement



● Peak Gain

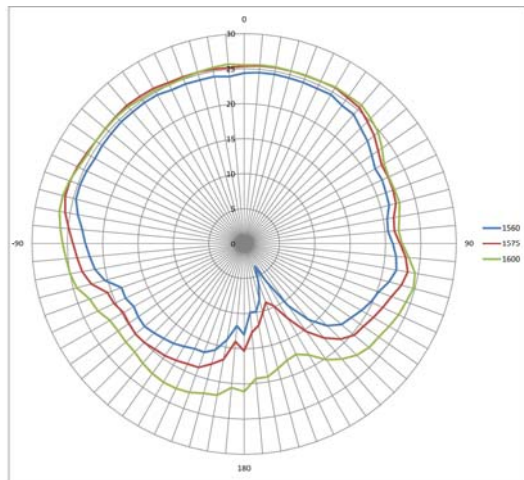


● **Axial Ratio**

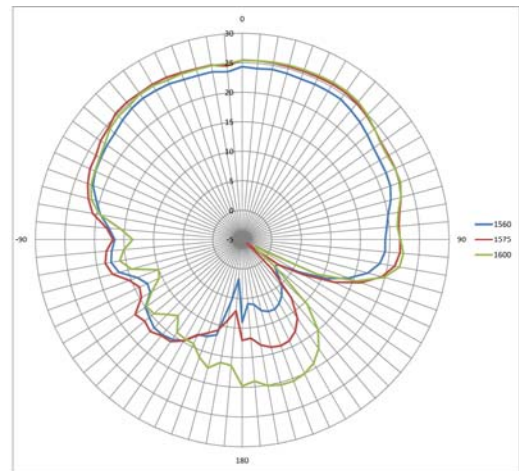


● **Radiation Pattern (RHCP)**

XZ Plane

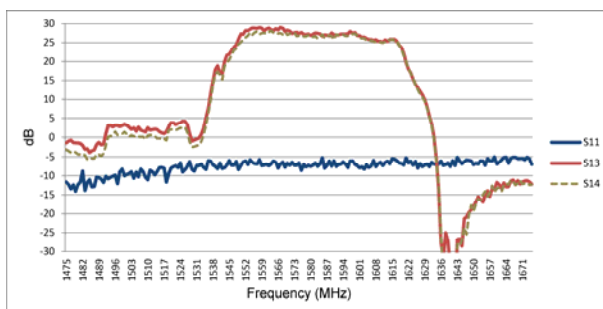


YZ Plane

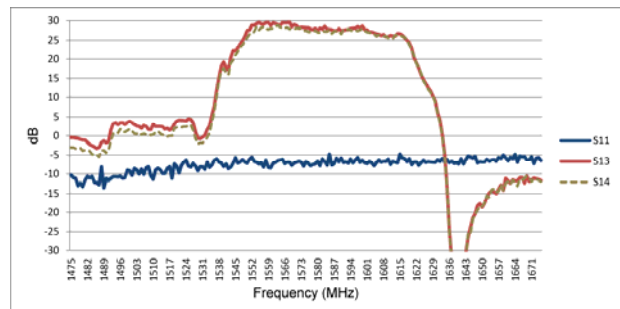


● **Module performance**

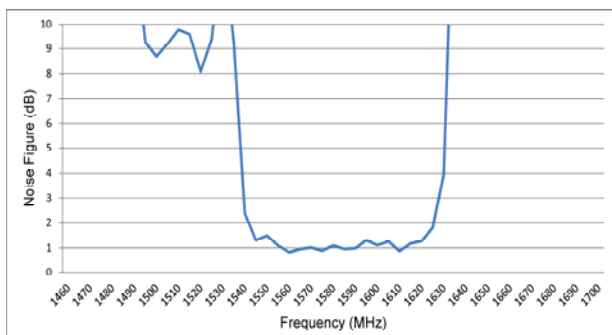
PCBA 3V_Gain_Return Loss



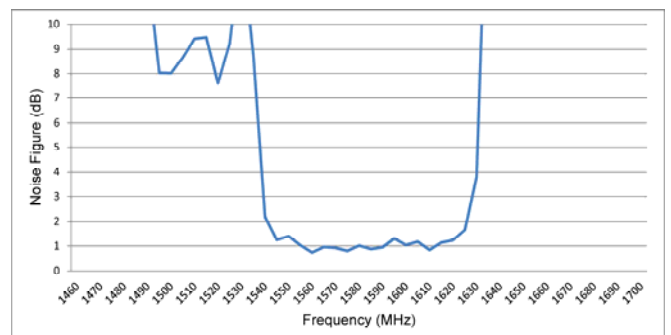
PCBA 5V_Gain_Return Loss



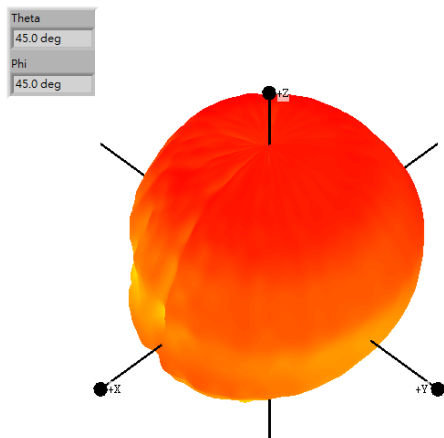
PCBA 3V_Noise Figure



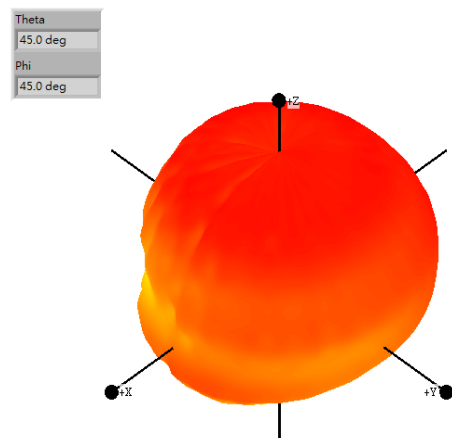
PCBA 5V_Noise Figure



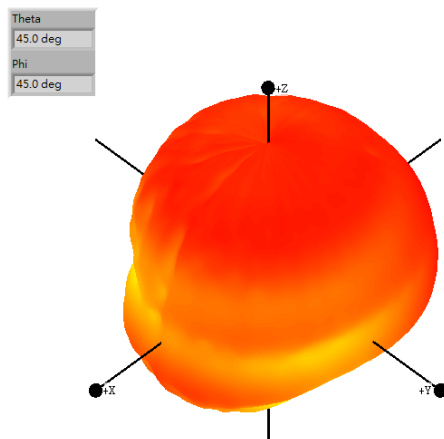
● **3D Radiation Pattern (RHCP)/ Filtering**
1555MHz/ Peak Gain: 27.20dBic



1575MHz/ Peak Gain: 30.05dBic



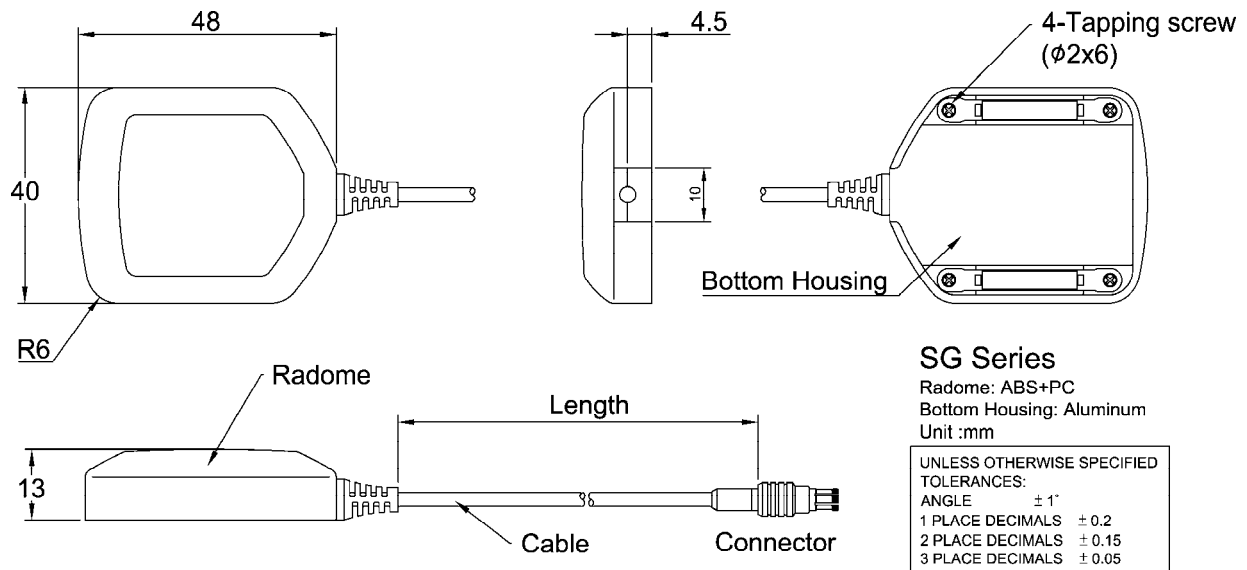
1600MHz/ Peak Gain: 32.33dBic



2. Mechanical Specifications

Weight (Without Cable)	42 grams max.
Size	48 x 40 x 13 mm
Mounting	Magnetic base
RF Cable/ Connector	Option

Note: Specifications subject to change without notice.



3. Environmental Specification

Operating Temperature	-40°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	95%~100% RH
Weatherproof	IP56

Note: Specifications subject to change without notice.