



-7RF Antenna- 7RF-AAK-0001-G1256-01

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I. Introduction.

7RF provides external high accuracy RTK GNSS L1/L2/L5/L6 active antenna. P/N: AAK-0001-G1256-01 antenna supports GPS L1/L2/L5, Beidou B1/B2/B3, GLONASS G1/G2/G3, Galileo E1/E5/E6 navigation system application. The antenna direct using adhesive for mounting on target surface, Magnetic also an option. The antenna has 5 meters RG174 coaxial cable with SMA male connector as standard configuration. Cable length & Connector are customizable. Contact your local sales to get more product information.

II. Antenna Specification Table

Antenna

1	Frequency Range	GPS:L1/L2/L5 BEIDOU:B1/B2/B3 GLONASS:G1/G2/G3 GALILEO :E1/E5/E6
2	Impedance	50Ω
3	Polarization	RHCP
4	V.S.W.R	≤2.0
5	Gain	1.0dBic(1.176~1283MHz) 3.0dBic(1.559~1610MHz) at Zenith Max
6	Axial Ratio	≤15dB: at Zenith

LNA Circuit

1	Frequency Range	GPS:L1/L2/L5 BEIDOU:B1/B2/B3 GLONASS:G1/G2/G3 GALILEO :E1/E5/E6
2	DC Voltage	3.3~5.0V
3	Gain	30±3dB
4	Out band Rejection (Absolute value)	≥25dB(F _H +100MHz) ≥20dB(F _L -100MHz)
5	Output (VSWR)	≤2.0
6	Noise Figure	≤2.0dB
7	DC current	≤50mA (3.3V)



Material Specification

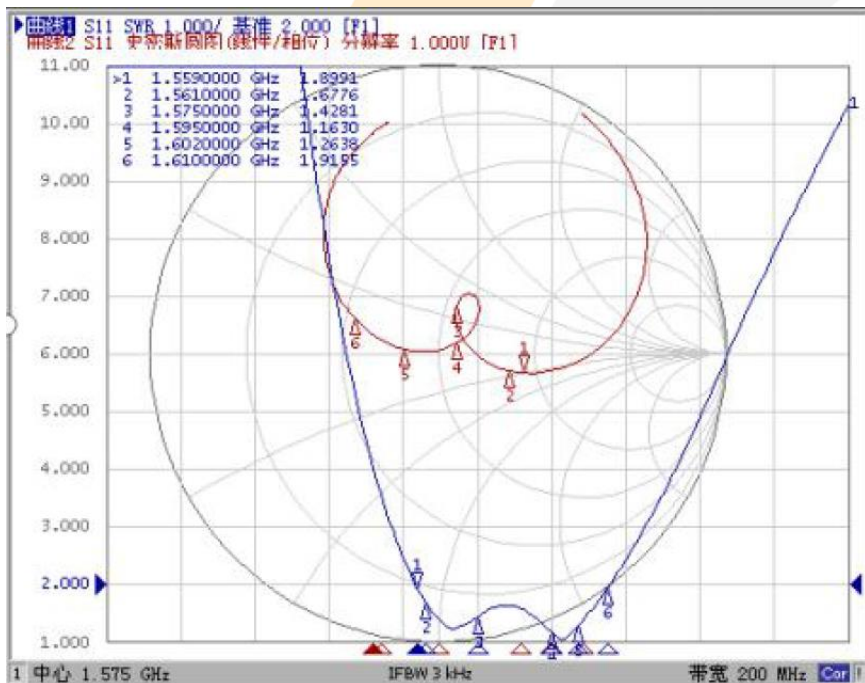
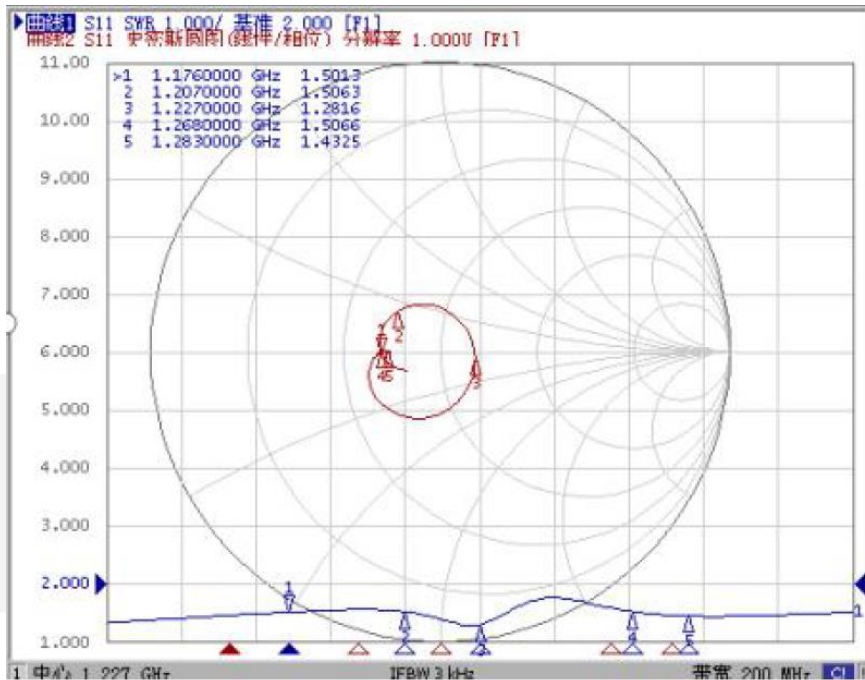
Antenna	Dielectric Ceramics
PCB	FR4
Shielding	Tinplate
RF Connector	SMA-J
Plastic shell	ABS

Environmental Specification

Working Temp	-40°C~+80°C
Storage Temp	-45°C~+85°C
Vibration	Sine sweep 1g(0-p)
	10~55~10Hz each axis
Waterproof Rate	IPX6
ESD Protection	+/- 6kv (direct discharge) and +/- 8kv (indirect discharge) IP67

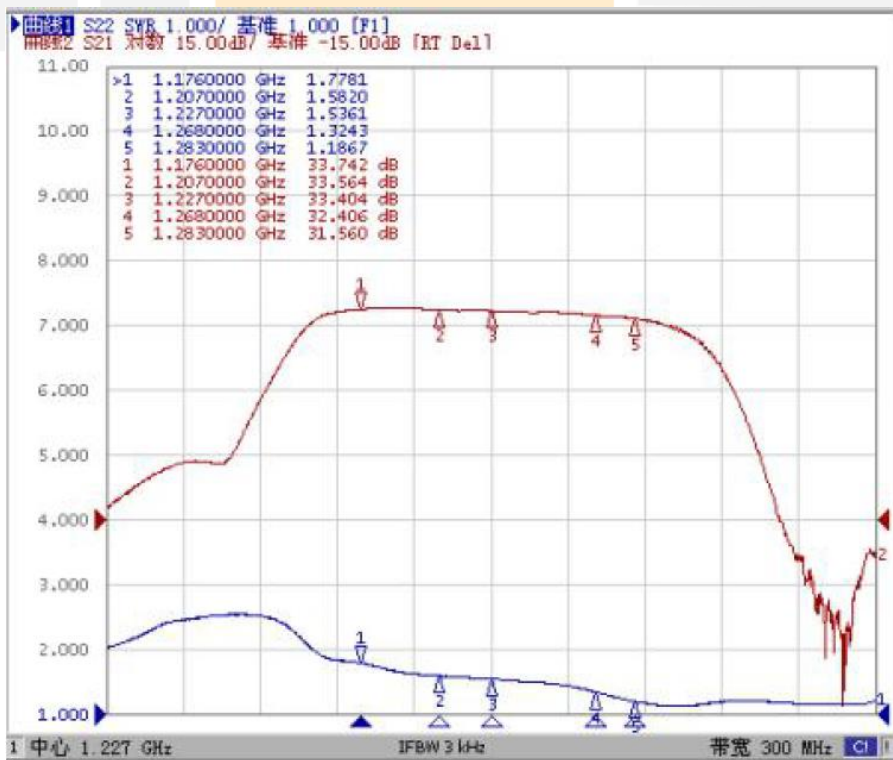
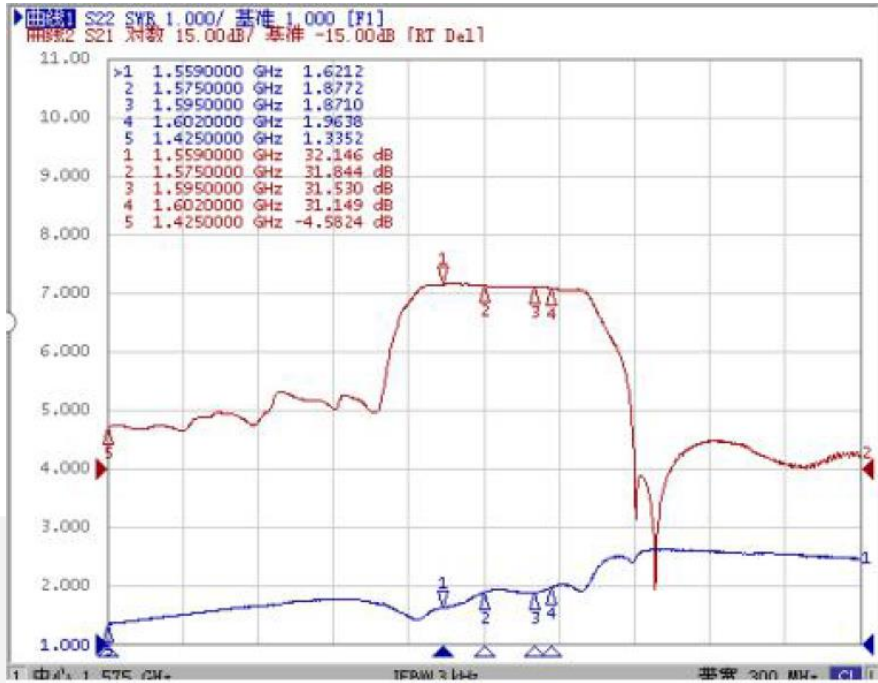
III. Antenna Parameters

Patch Antenna S-Parameter:



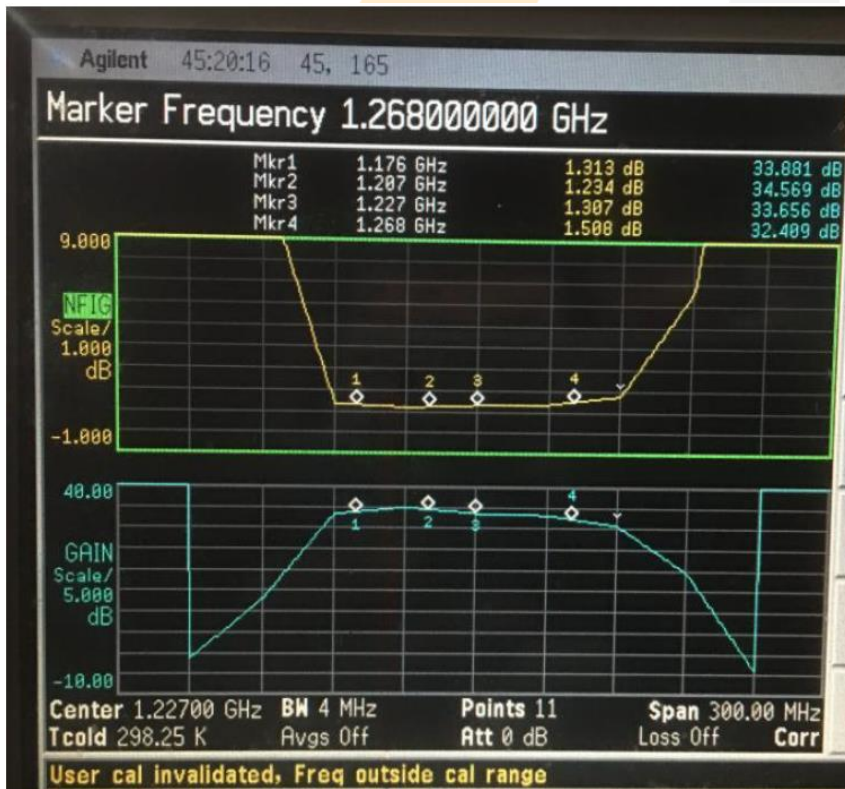
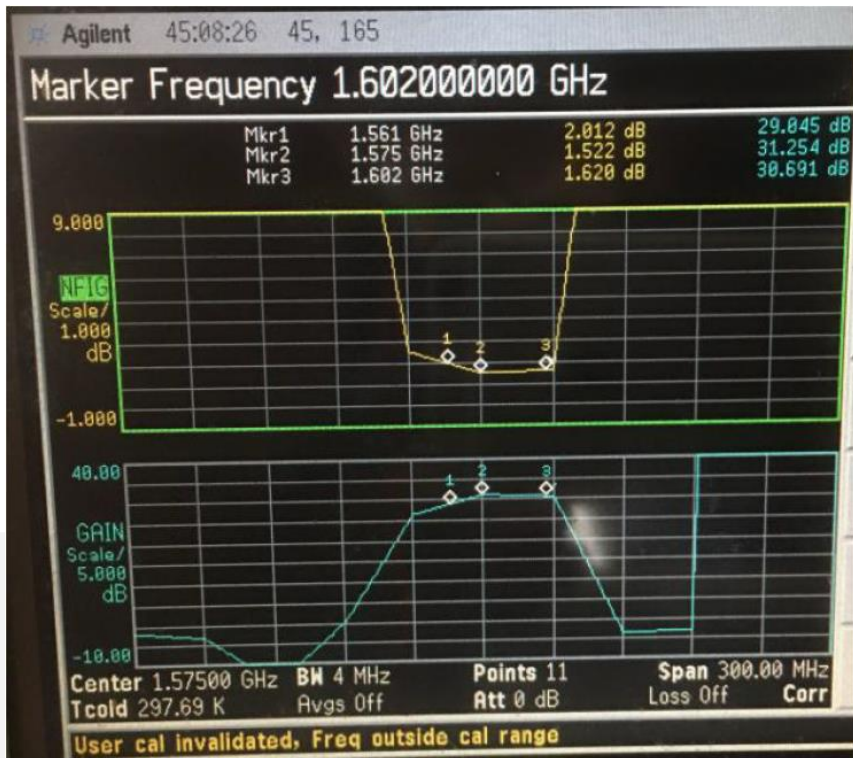


LNA Circuit Gain:



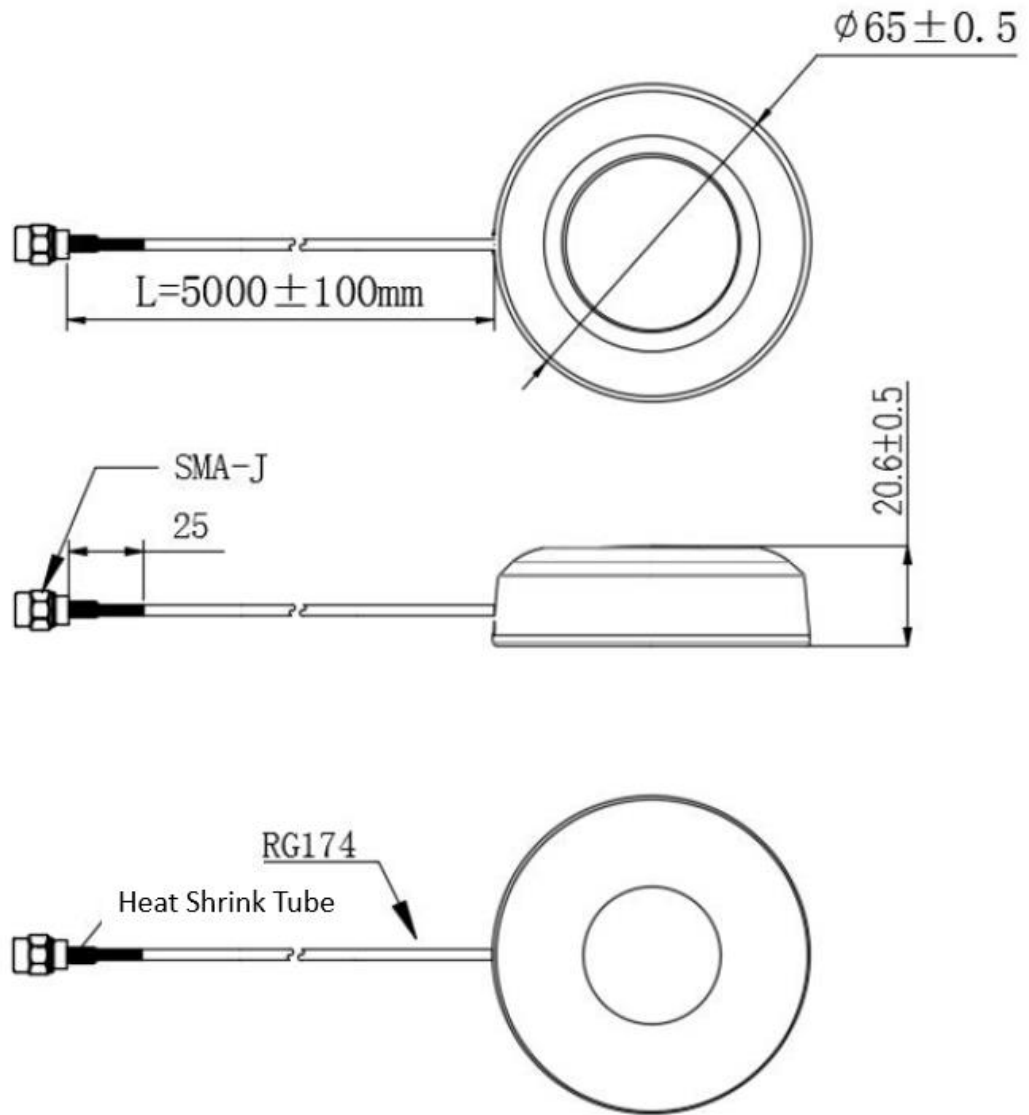


LNA Circuit Noise Figure:





IV. Antenna Drawing



Unit:mm



V. Packaging Method



100 pieces per Carton. Carton Size: 630*460*105mm.

