SUNNYWAY

SWG008

PN: SW19056IB93



Sunnyway Technology

Add: Building 65-302, No.421 Hongcao Road, Xuhui District, Shanghai
Tel: +86-021-6484 2326 Fax: +86-021-6484 2328
Email: sales@sunny-way.com Web: www.sunny-way.com

1. Electrical Specifications

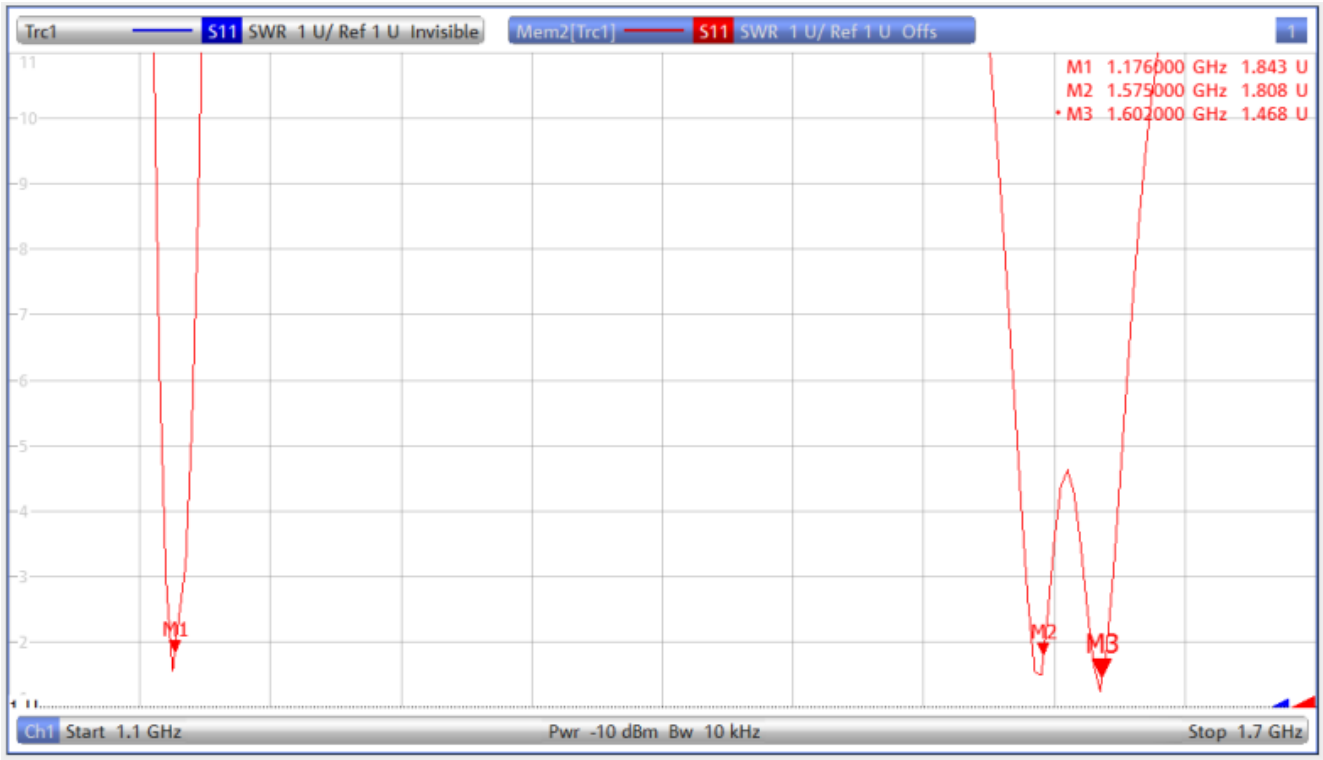
Standards	GPS/Glonass/Galileo L1+L5		
Frequency range (MHz)	1176MHz	1575MHz	1602MHz
Peak Gain (dBi)	1.44dBi	-3.00dBi	-0.41dBi
Average Gain (dB)	-4.69dB	-5.54dB	-5.95dB
VSWR	1.84	1.80	1.46
Return Loss	-11.36	-11.92	-16.12
Efficiency (%)	39.3%	27.9%	25.4%
Polarization mode	Circular polarization	Circular polarization	Circular polarization
Radiation pattern	Hemispherical	Hemispherical	Hemispherical

2. Mechanical and Environmental Specification

Mounting Type	Adhesive
Adhesive Type	NITTO5000NS
Connector Type	welding
Antenna size(mm)	18mm (L) x18 mm (W) x 4mm (H) 15mm (L) x15 mm (W) x 2mm (H)
Material	Ceramic
Cable length(mm)	/
Operating Temperature (˚C)	-40 ˚C ~ +85 ˚C
Storage Temperature(˚C)	-40 ˚C ~ +85 ˚C

3. Antenna parameters

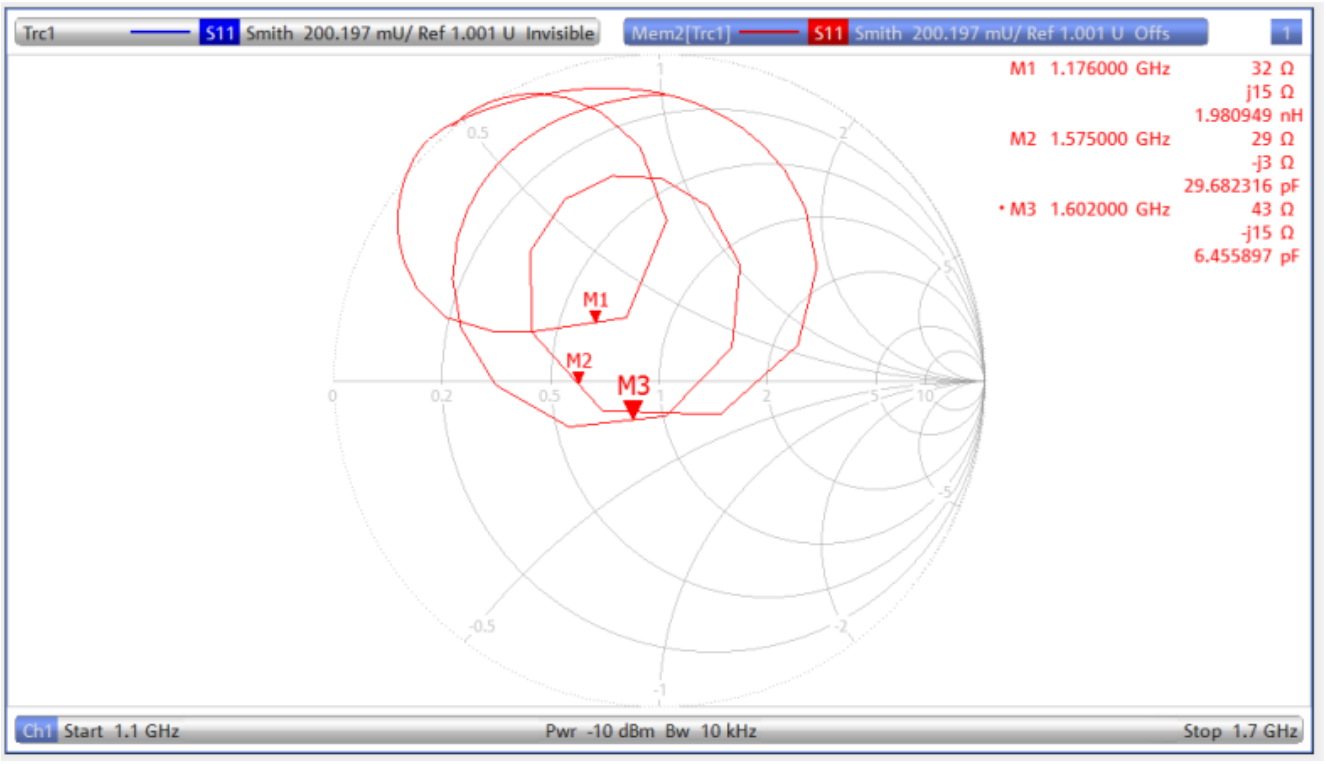
FRE（MHz）	1176	1575	1602
VSWR	1.84	1.80	1.46
Return Loss	-11.36	-11.92	-16.12
Eff (%)	39.3	27.9	25.4
PEAK Gain (dBi)	1.44	-3.00	-0.41



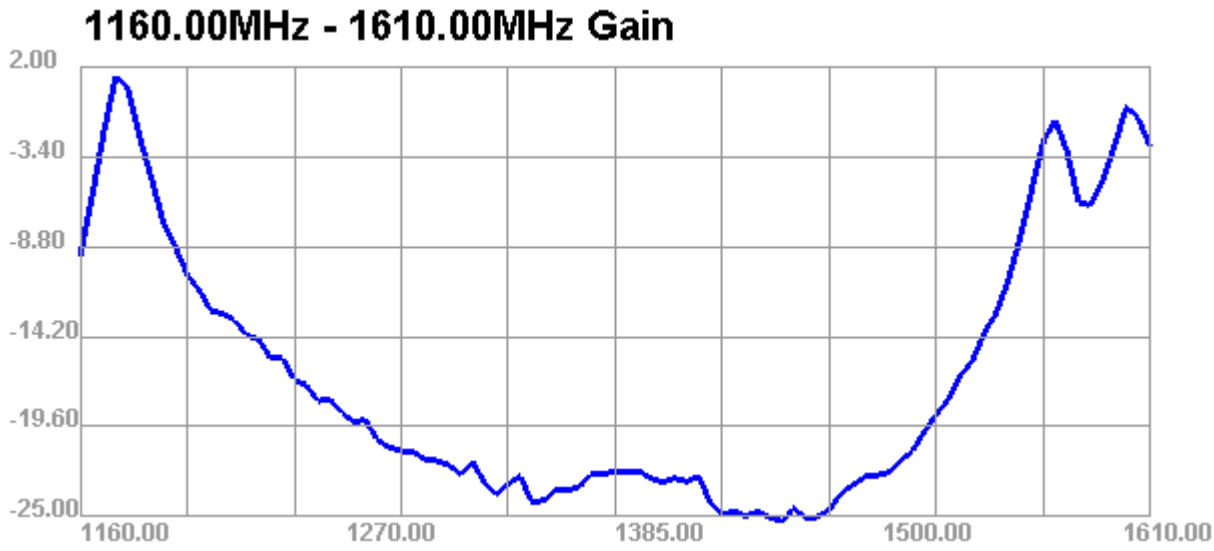
VSWR

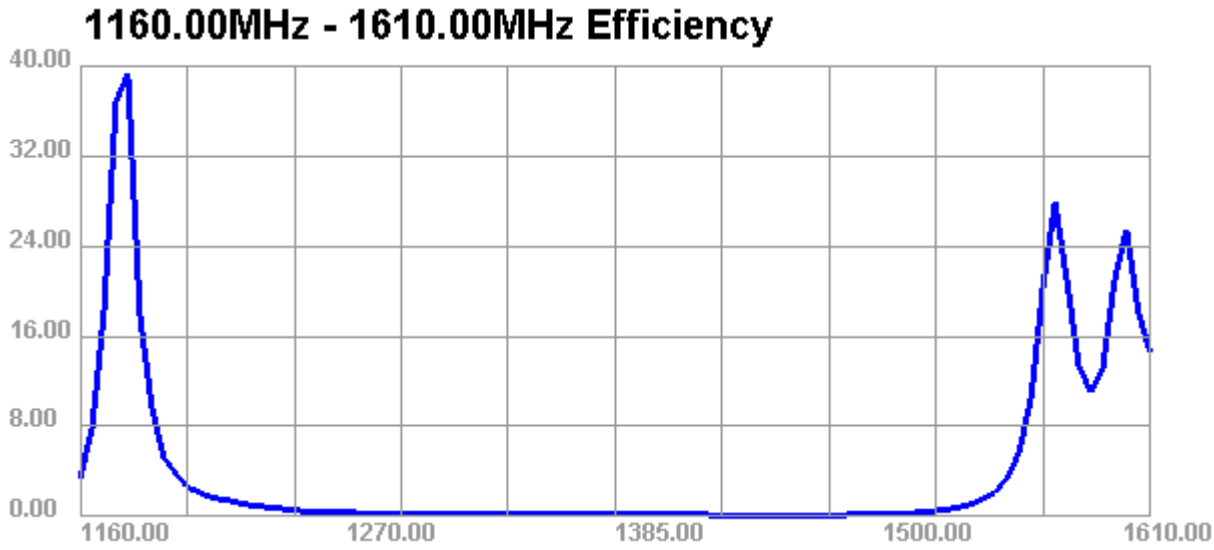


Return Loss

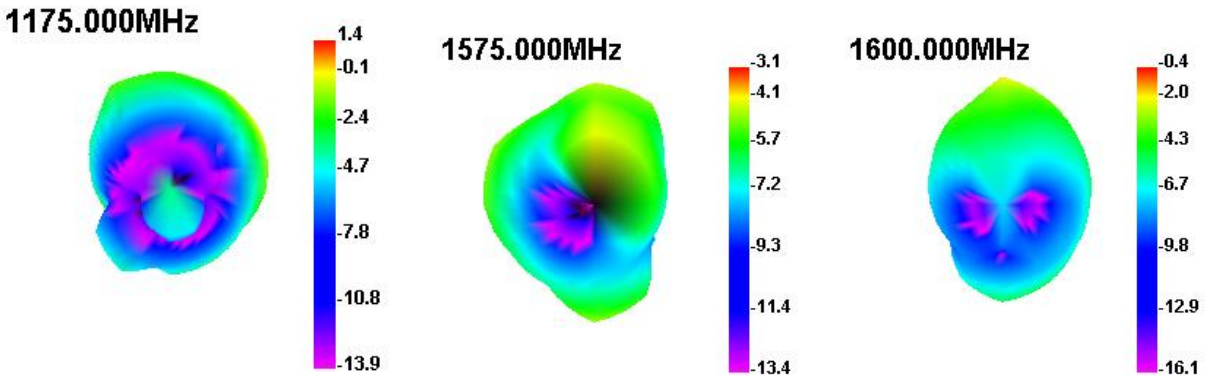


Smith

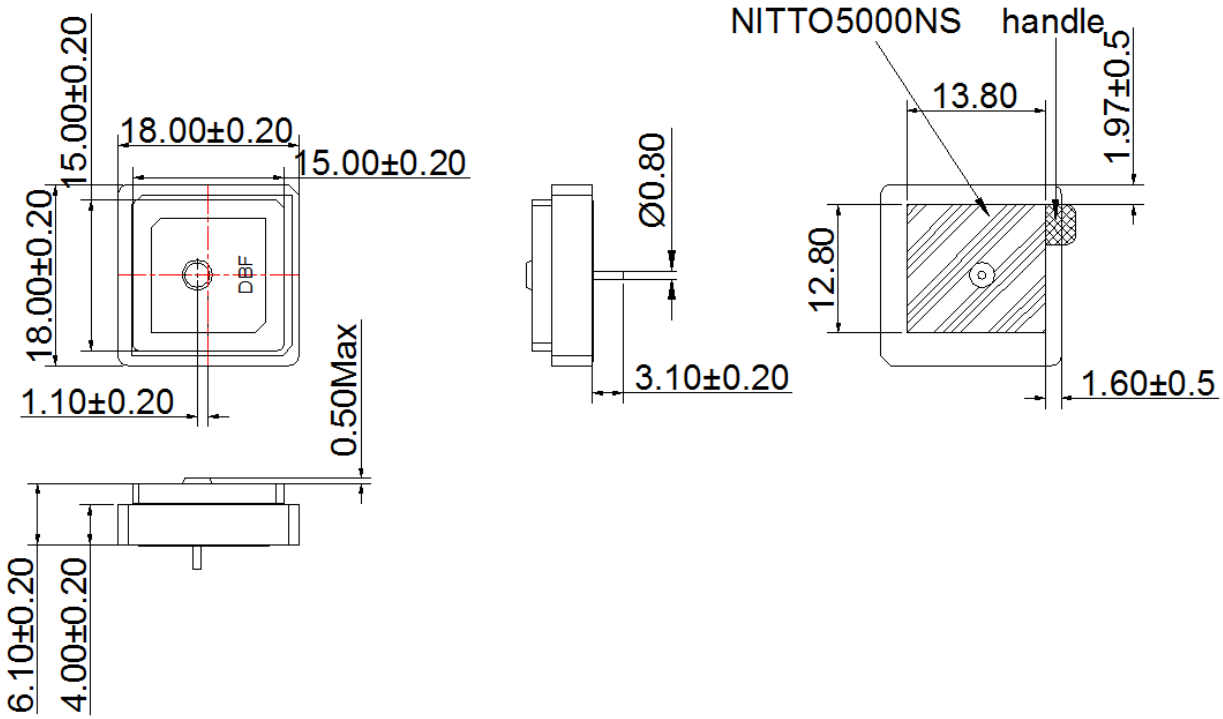




Directional pattern



4. Antenna Drawings



5. Drop test

Department	Antenna Name	Test Quantity	Test Standard	Test Date
MD	SWG008	1pc	N/A	2019/10/31

Test Purpose:

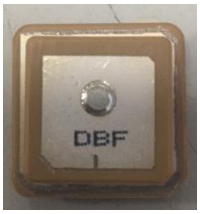
Verify the upper and lower ceramics do not fall off in the event of falling at a certain height.

Test Process:

According to the ceramic external antenna assembly requirements:

Soldered to the PCB, assembled into the outer casing, at a height of 1.5 meters, free fall on the concrete floor, fell 3 times with optional corner and/or 3 sides.







Pass Criteria:

1、There is no falling off at the ceramic thimble soldering PCB board;

2、There is no looseness between the upper and lower ceramic sheets.

Test Result：

After the drop test, the outer casing is opened, and the inner ceramic antenna thimble is not welded off at the PCB board, and there is no looseness between the upper and lower ceramic sheets.

PASS■ **Fail□**

Test Engineer/Date：	Approved by/Date：
Yu Jiang/2019-10-31	Chen Xiaoping/2019-10-31