SUNNYWAY

SWE014

PN: SW19044EB56



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

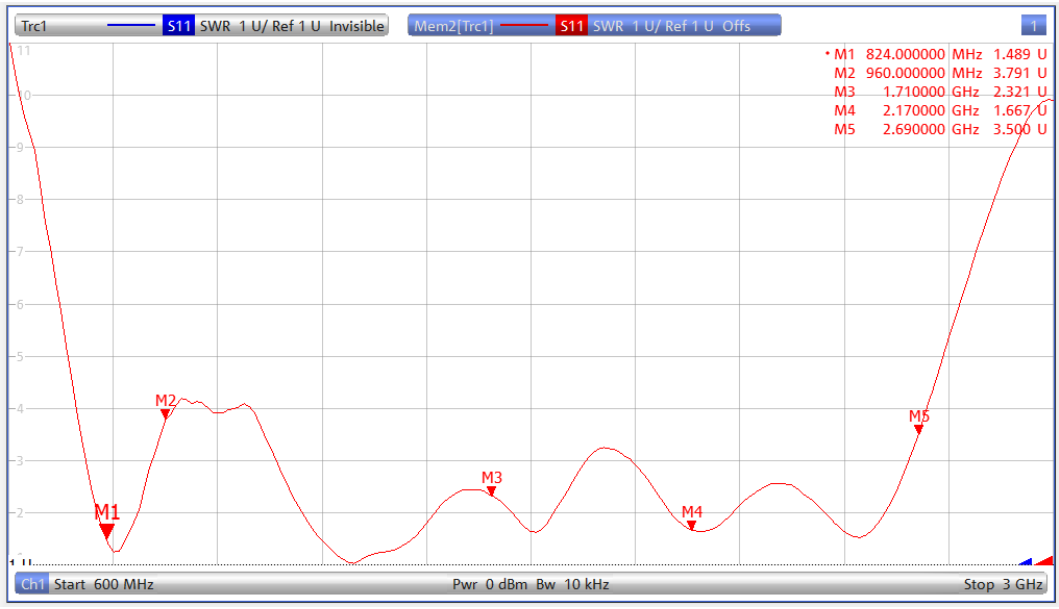
Standards	4G&3G&2G	
Frequency range (MHz)	824~960MHz	1710~2690MHz
Peak Gain (dBi)	-0.1~4.0dBi	-1.0~4.5dBi
Average Gain (dB)	-2.2~-0.5dB	-4.1~-1.5dB
VSWR	<3.8	<3.5
Return Loss	<-4.6	<-5.1
Efficiency (%)	60~90%	39~70%
Polarization mode	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50
Max. Input Power(W)	25	25

2. Mechanical and Environmental Specification

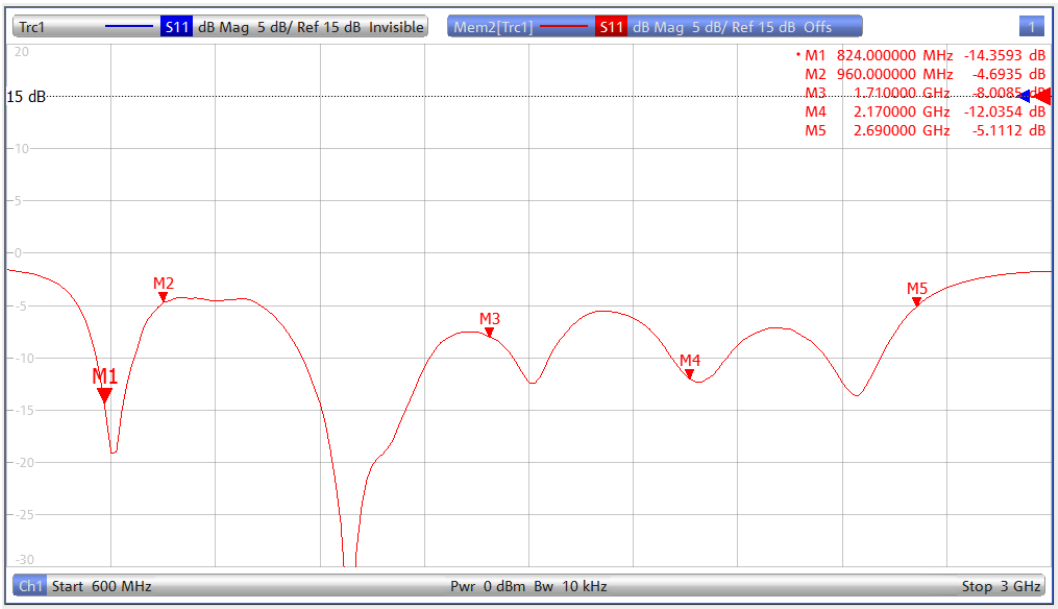
Mounting Type	Connector Mount
Connector Type	SMA
Antenna size(mm)	195xφ13mm
Material	ABS
Operating Temperature (˚C)	- 40 ˚C ~ + 85 ˚C
Storage Temperature(˚C)	- 40 ˚C ~ + 85 ˚C

3. Antenna parameters

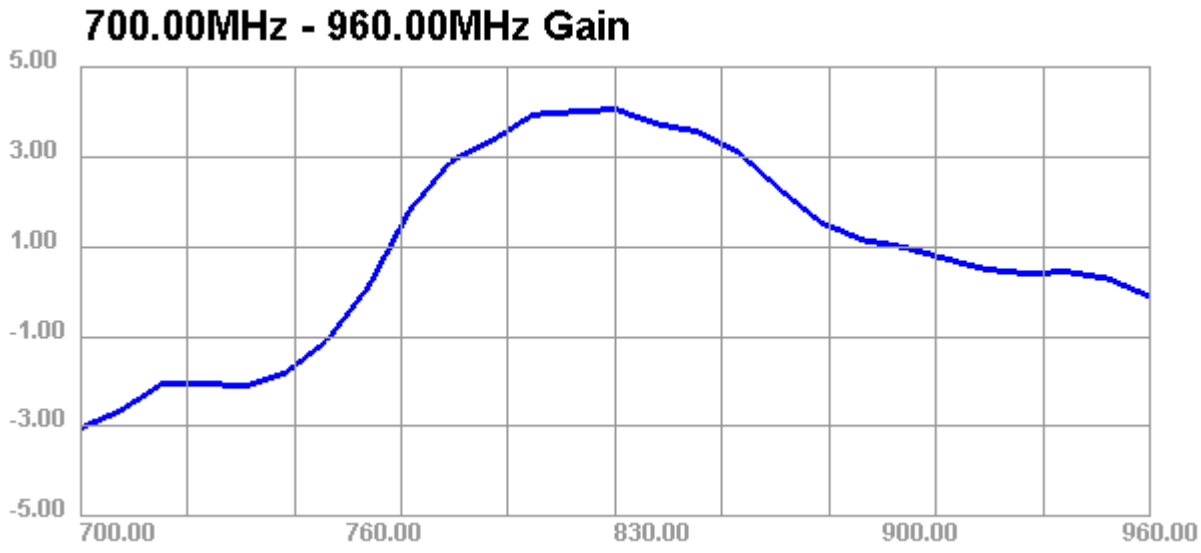
FRE（MHz）	824	960	1710	2170	2690
VSWR	1.48	3.79	2.32	1.66	3.50
Return Loss	-14.35	-4.69	-8.00	-12.03	-5.11
Eff (%)	90.0	60.1	51.3	57.7	39.1
PEAK Gain (dBi)	4.00	-0.11	3.25	0.81	-0.98

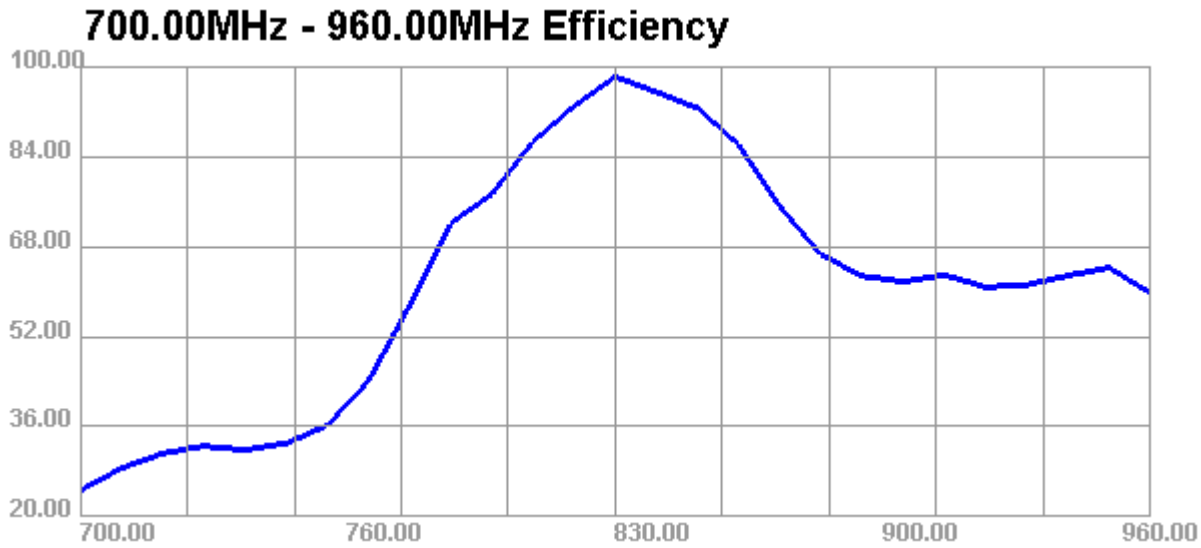


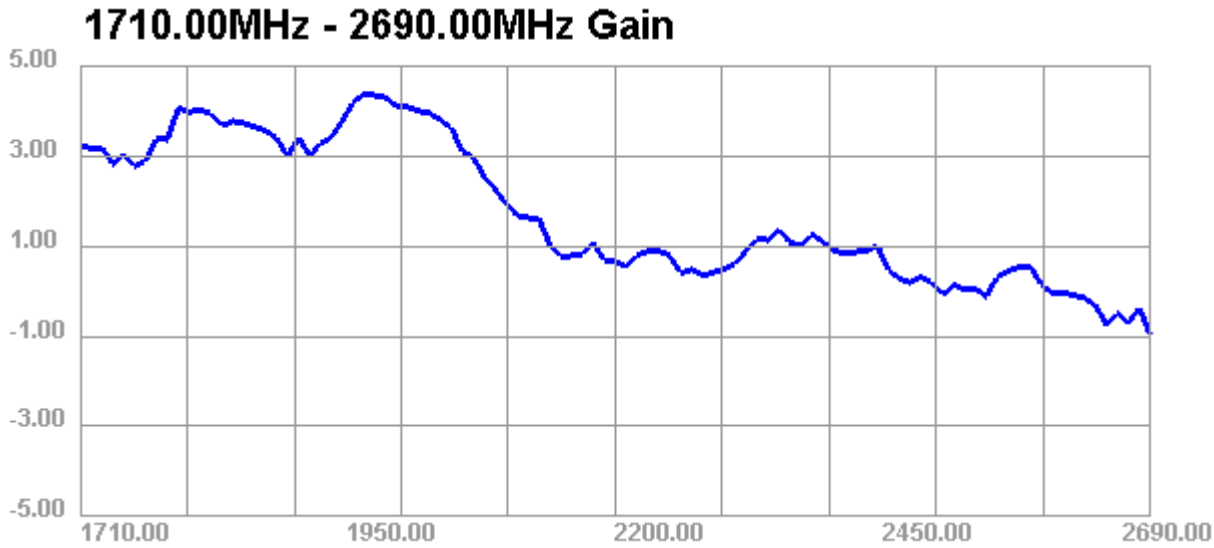
VSWR

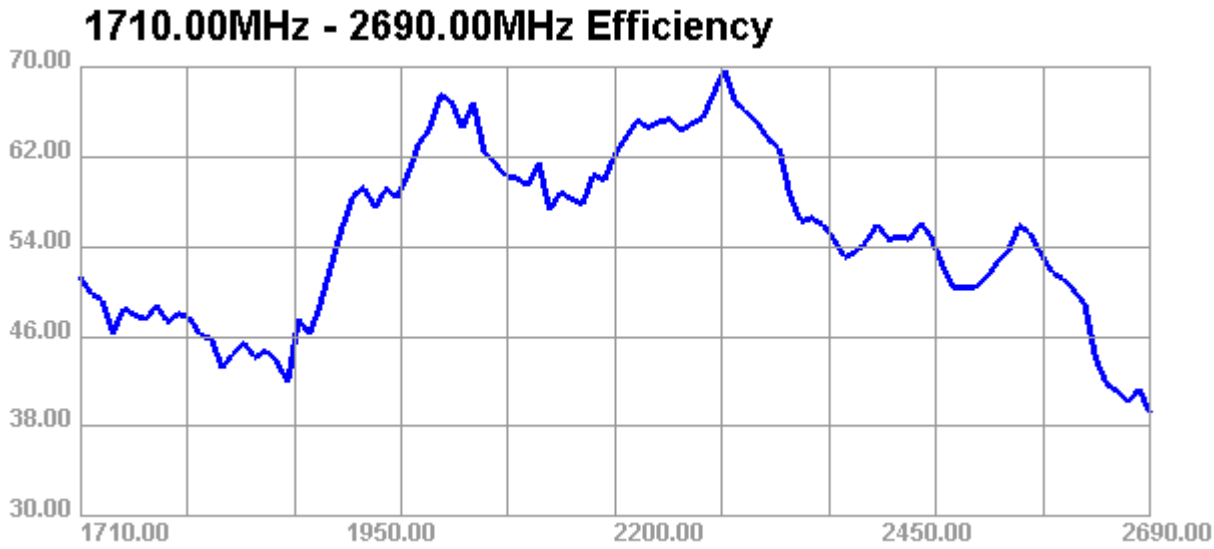

Trc1 S11 dB Mag 5 dB/ Ref 15 dB Invisible
Mem2[Trc1] S11 dB Mag 5 dB/ Ref 15 dB Offs
M1 824.000000 MHz -14.3593 dB
M2 960.000000 MHz -4.6935 dB
M3 1.710000 GHz -8.0085 dB
M4 2.170000 GHz -12.0354 dB
M5 2.690000 GHz -5.1112 dB
15 dB
M1
M2
M3
M4
M5
Ch1 Start 600 MHz
Pwr 0 dBm Bw 10 kHz
Stop 3 GHz

Return Loss

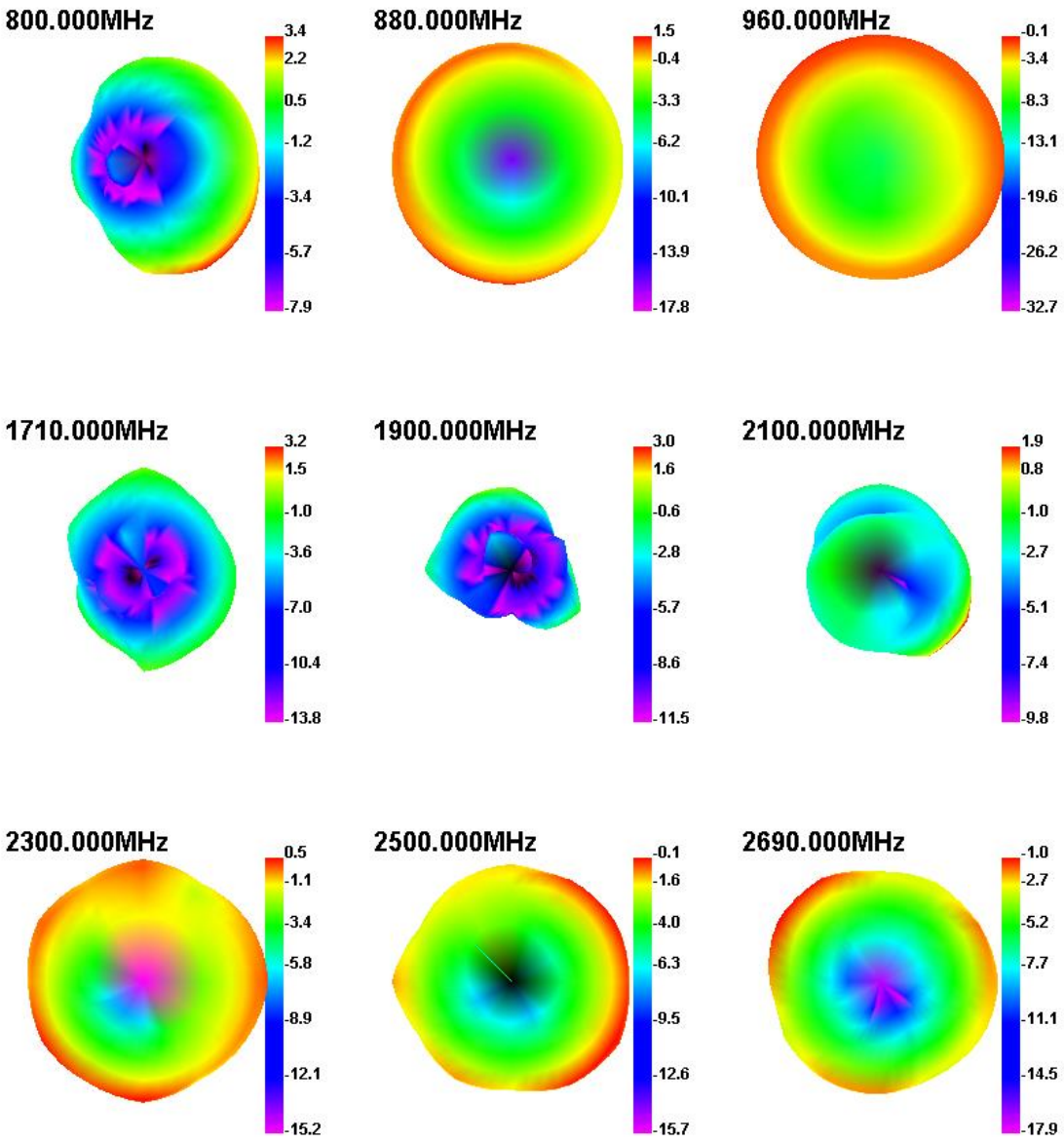

700.00MHz - 960.00MHz Gain
5.00
3.00
1.00
-1.00
-3.00
-5.00
700.00
760.00
830.00
900.00
960.00


700.00MHz - 960.00MHz Efficiency
100.00
84.00
68.00
52.00
36.00
20.00
700.00
760.00
830.00
900.00
960.00

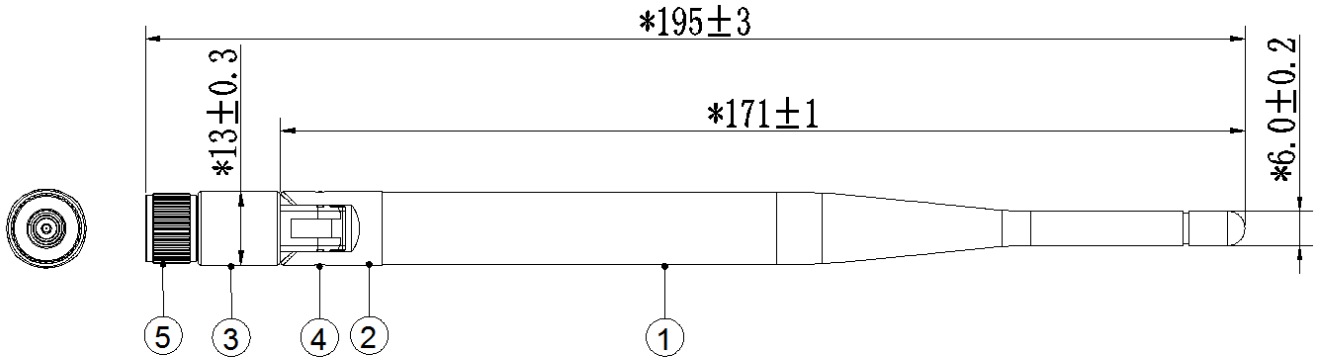

1710.00MHz - 2690.00MHz Gain
5.00
3.00
1.00
-1.00
-3.00
-5.00
1710.00
1950.00
2200.00
2450.00
2690.00


1710.00MHz - 2690.00MHz Efficiency
70.00
62.00
54.00
46.00
38.00
30.00
1710.00
1950.00
2200.00
2450.00
2690.00

Directional pattern



4. Antenna Drawings



Series	Component name	Specification	Color	Quantity
5	SMA	SMA-J	black	1
4	rivet	PC+PBT	black	2
3	Lower Firmware	ABS	black	1
2	Upper firmware	ABS	black	1
1	noumenon	ABS	black	1