SUNNYWAY



SWE050

PN: SW21012EB56

Features:

- Antenna for 824~960MHz,1710~2170MHz.
- High gain.
- Impedance 50 Ohm.

Applications:

- Portable Devices.
- Remote monitoring.
- Network Devices.
- Gateways.
- UWB.
- Others.

Sunnyway Technology

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1. Electrical Specifications

Standards	3G&2G	
Frequency range (MHz)	824~960MHz	1710~2170MHz
Peak Gain (dBi)	-2.6~3.1dBi	2.2~4.8dBi
Average Gain (dB)	-7.4~-2.5dB	-5.5~-3.3dB
VSWR	＜3.5	＜2.5
Return Loss	＜-5.0	＜-7.0
Efficiency (%)	18~57%	28~47%
Polarization mode	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50
Max. Input Power(W)	25	25

Note: Tested with 1000mm cable length - RG174 on 30x30cm ground plane

2. Mechanical and Environmental Specification

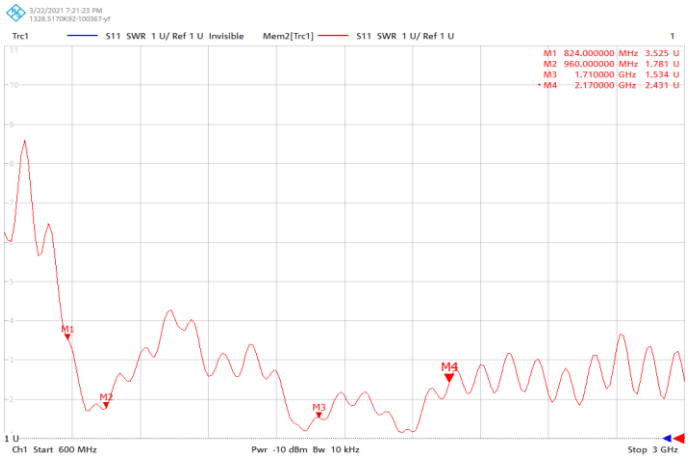
Mounting Type	Connector Mount
Connector Type	SMA (1M)
Antenna size(mm)	263*φ30
Material	ABS+PC
Operating Temperature (˚C)	- 40 ˚C ~ + 85 ˚C
Storage Temperature(˚C)	- 40 ˚C ~ + 85 ˚C

3. Antenna parameters

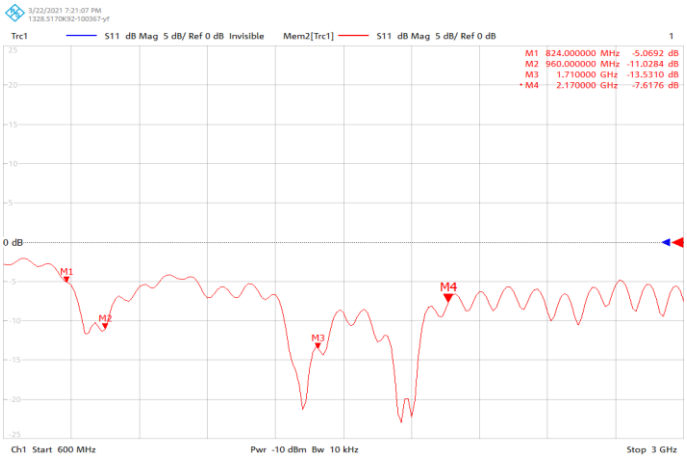
3.1 General Data

FRE (MHz)	824	960	1710	2170
VSWR	3.5	1.7	1.5	2.4
Return Loss	-5.0	-11.0	-13.5	-7.6
Eff (%)	21.7	37.4	37.6	28.6
Average Gain(dB)	-6.6	-4.2	-4.2	-5.4

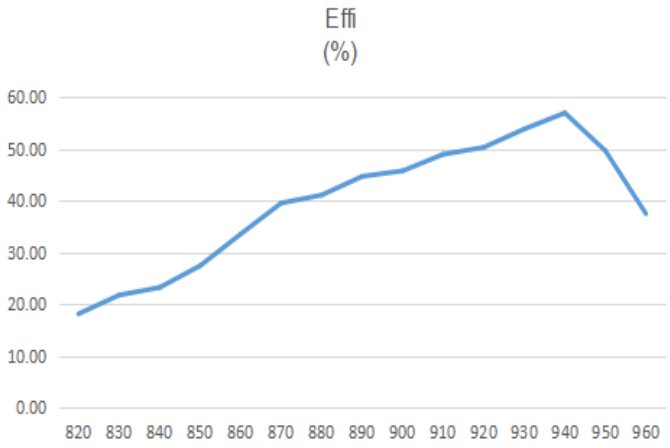
3.2 VSWR

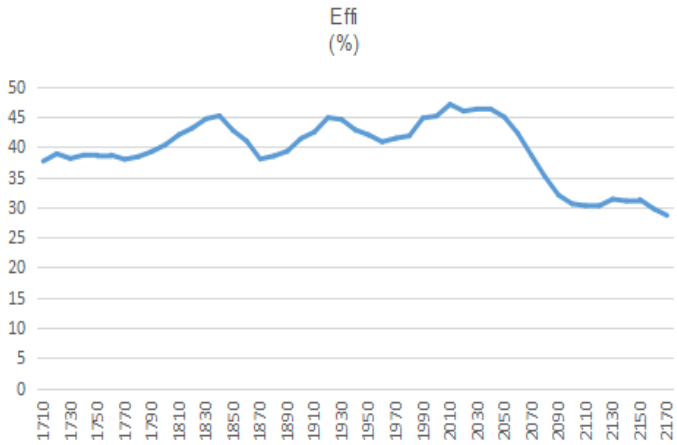


3.3 Return Loss

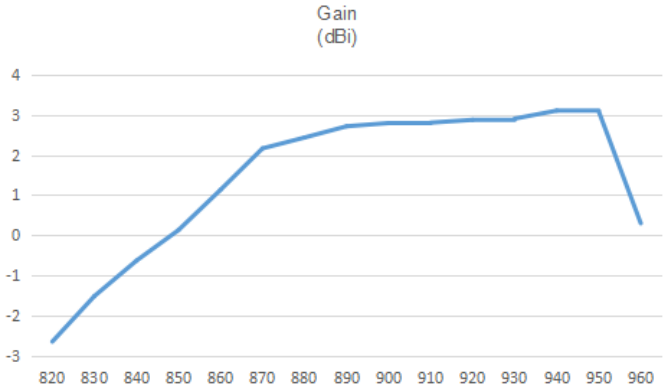


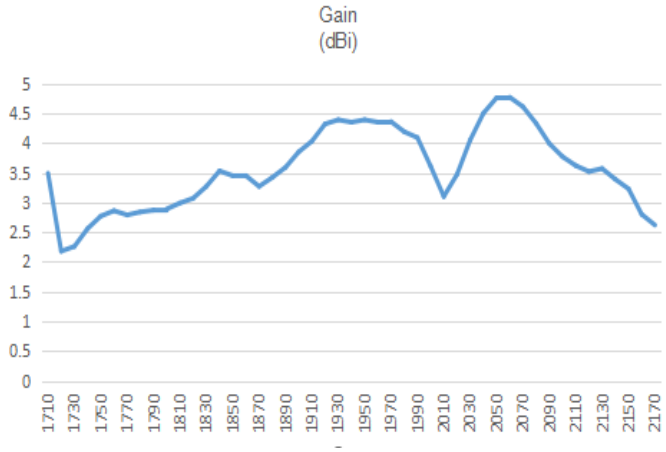
3.4 Efficiency



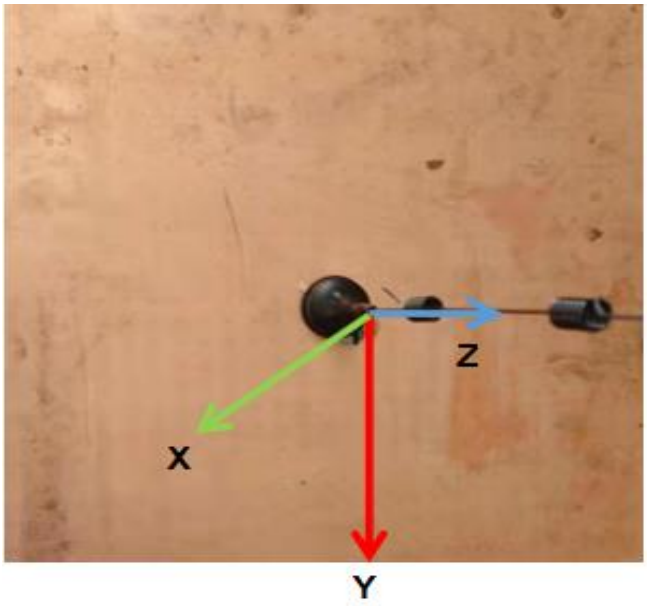


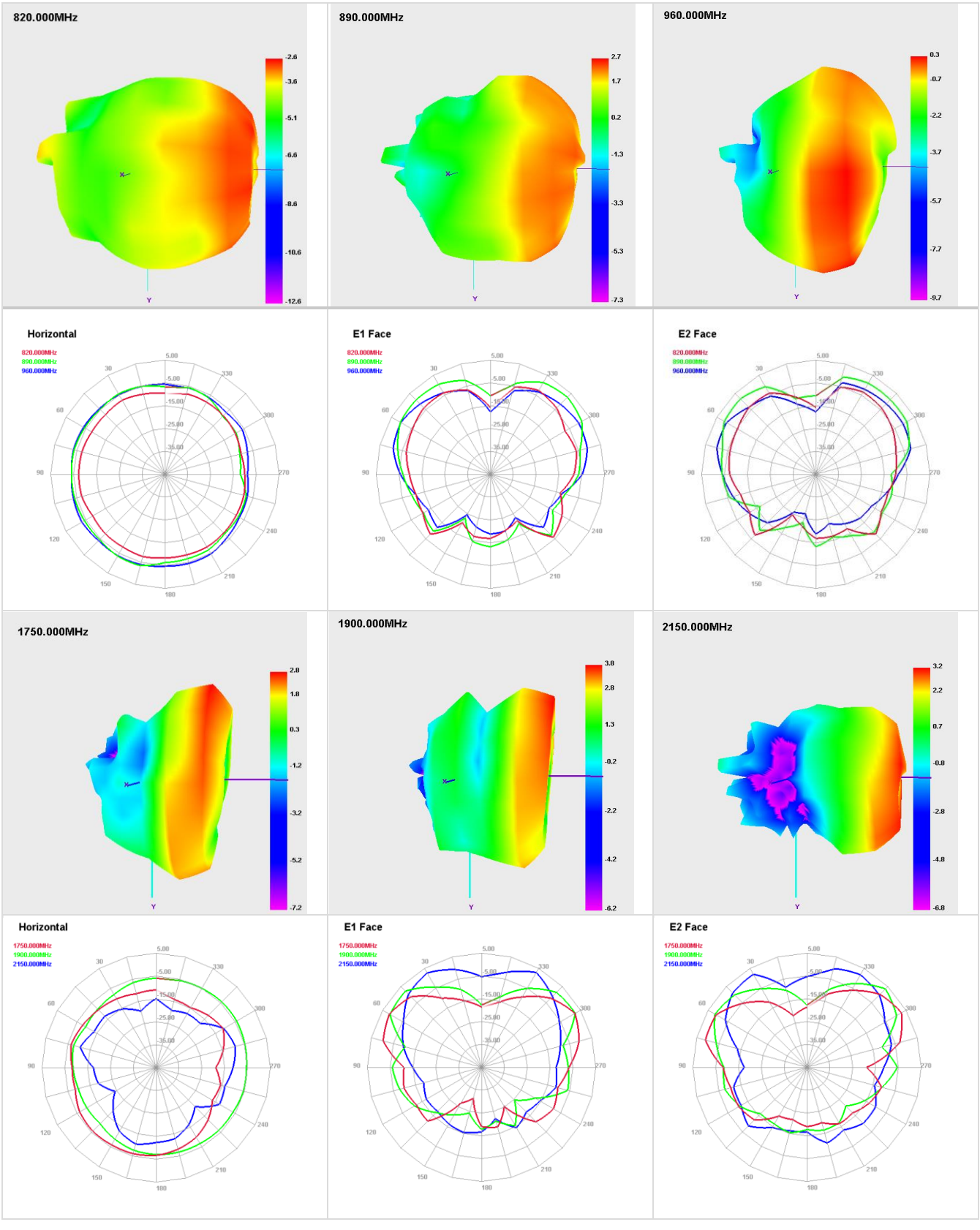
3.5 Gain



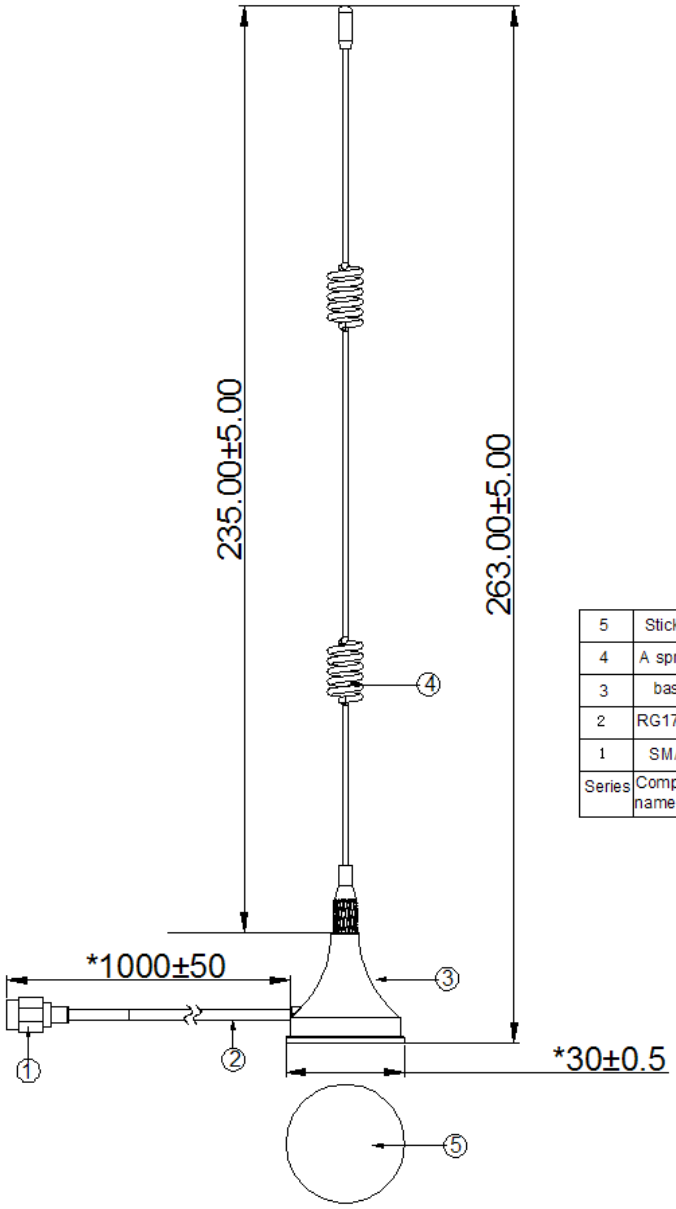


3.6 Directional Pattern




820.000MHz
890.000MHz
960.000MHz
Horizontal
E1 Face
E2 Face
1750.000MHz
1900.000MHz
2150.000MHz
Horizontal
E1 Face
E2 Face

4. Antenna Drawings(Unit:mm)



Series	Component name	Specification	Color	Quantity
5	Stickers	PC	black	1
4	A spring bar	Steel wire electrophoresis	black	1
3	base	φ30.0mm	black	1
2	RG174cable	RG174 cable，1000mm	black	1
1	SMA	SMA-M	gold	1