



SWP001

PN: SW19001IG97

Key features:

- Frequency bands from 600~6000MHz
- Impedance 50ohm

Typical applications:

- 2G/3G/4G/5G cellular antenna
- Portable Devices
- Remote monitoring
- Network Devices
- Others

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1. Introduction



The Sunnyway RF SWP001 broadband PCB antenna is designed to cover all operating frequencies in the 600~6000MHz spectrum, covering all cellular, including all Cellular(5G/4G/3G/2G), NB-IoT, Cat-M, Wi-Fi, ISM and GNSS bands. excellent efficiency in all frequency bands, independent of ground, with easy-to-install.

The size of SWP001 antenna is 112.5*16.2*0.8mm, ultra-thin and wide-band, with high efficiency in the whole frequency band. It is assembled through a simple "peel and stick" process, securely attached to non-metallic surfaces with 3M adhesive. It enables designers to use only one antenna that covers LTE/NR frequencies.

Cables and connectors can be customized. as with all such antennas, the antenna should be installed with care. at least 10mm from metal parts or surfaces, ideally 20mm for best radiation efficiency.

Typical applications:

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- Others

2. Electrical Specification

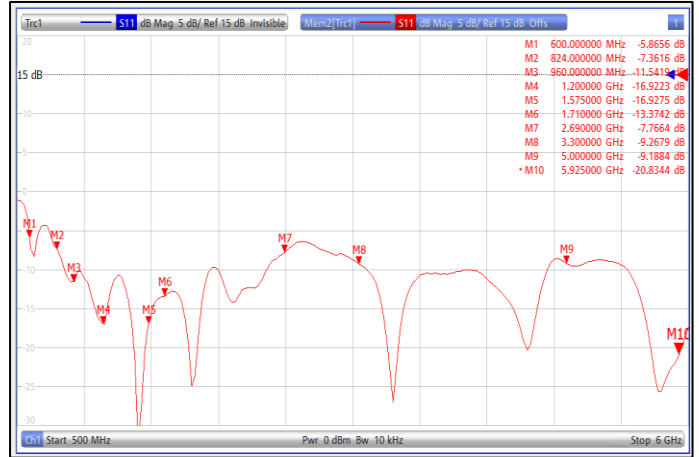
Standards	5G/4G/3G/2G/NB-IoT/CAT M1
Frequency range (MHz)	600~6000
Peak Gain (dBi)	-3.0~4.5
Average Gain (dB)	-5.2~-0.5
VSWR	<3.5
Return Loss	<-5.8
Efficiency (%)	30~90%
Polarization mode	Linear
Radiation pattern	Omni-Directional
Output impedance (Ω)	50
Max. Input Power(W)	5

3. Mechanical and Environmental Specification

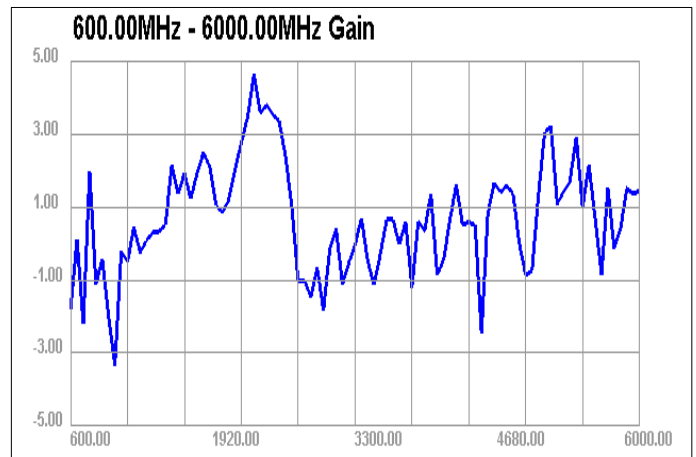
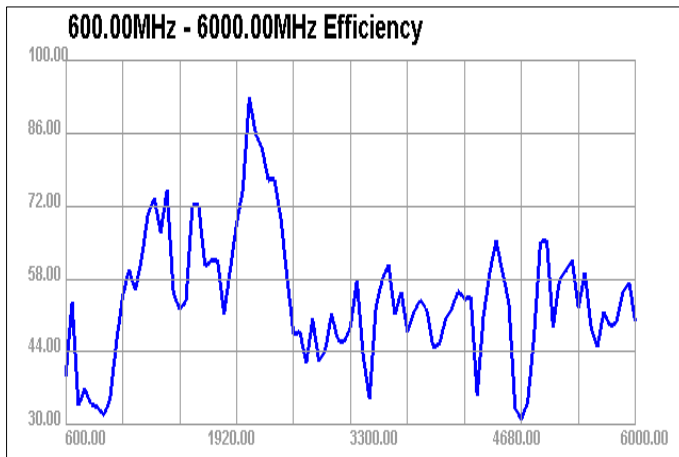
Mounting Type	Adhesive
Adhesive Type	3M9448A
Connector Type	IPEX MHF1
Antenna size(mm)	112.5mm (L) x 16.2mm (W) x 0.8mm (H)
Material	PCB
Cable length(mm)	101mm
Operating Temperature (°C)	- 40 °C ~ + 85 °C
Storage Temperature(°C)	-40°C ~ +85 °C

4. Antenna parameters

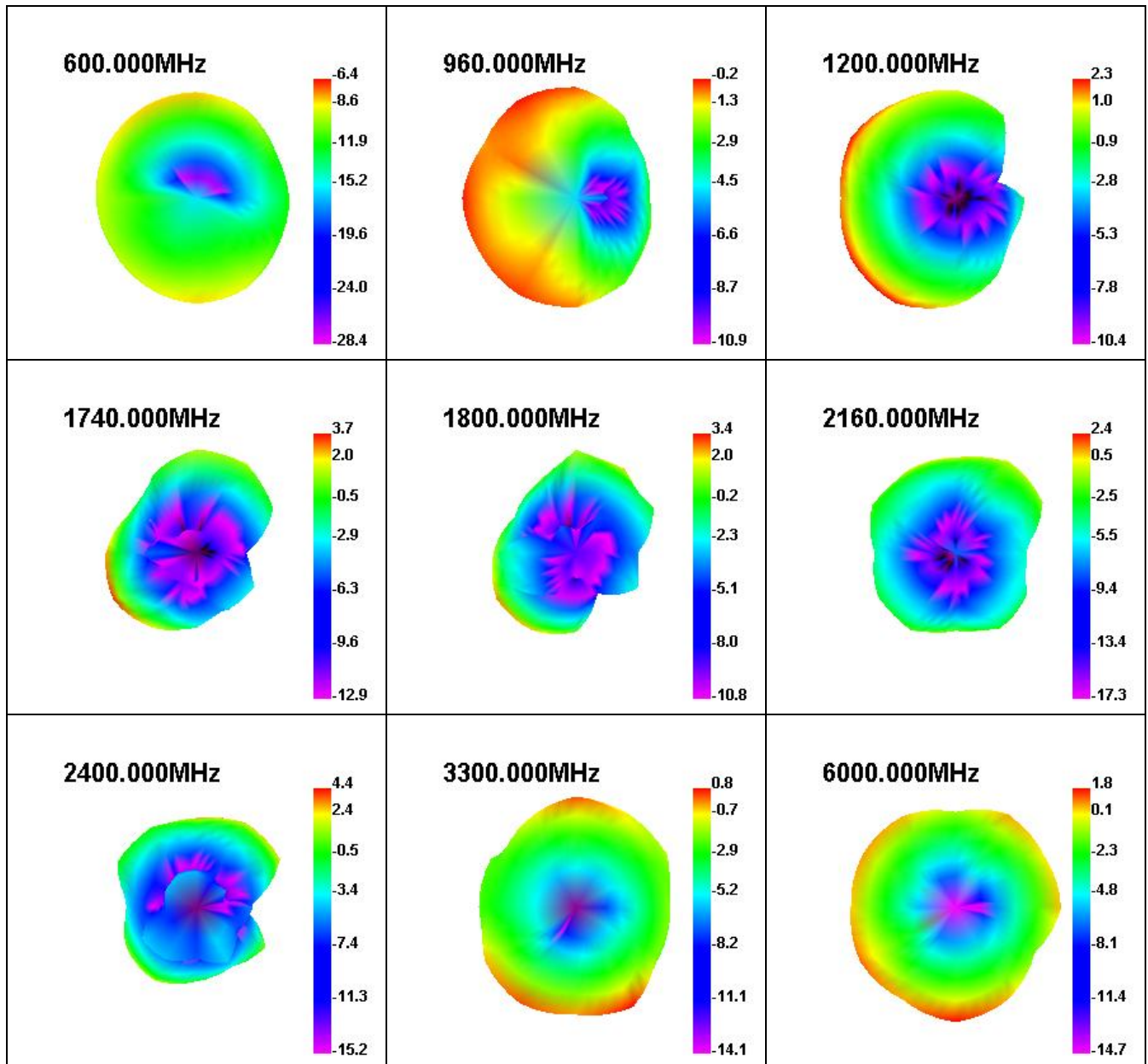
4.1 VSWR and Return Loss



4.2 Efficiency and Gain



4.3 Directional pattern



5. Antenna Drawing(Unit:mm)

