

SPECIFICATION

- Part No. : **PC14.03.3000D**
- Product Name : Circular Dual-Band 2.4~5.2GHz PCB antenna with cable and connector
- Feature : $\varnothing 42\text{mm} \times 0.8\text{mm}$
High efficiency antenna for Wi-Fi/ Bluetooth/ ZigBee applications
3M Rg-174 RP-SMA(M)
Stable efficiency, gain and radiation patterns
Cable and Connector fully customizable
RoHS Compliant



1. Introduction

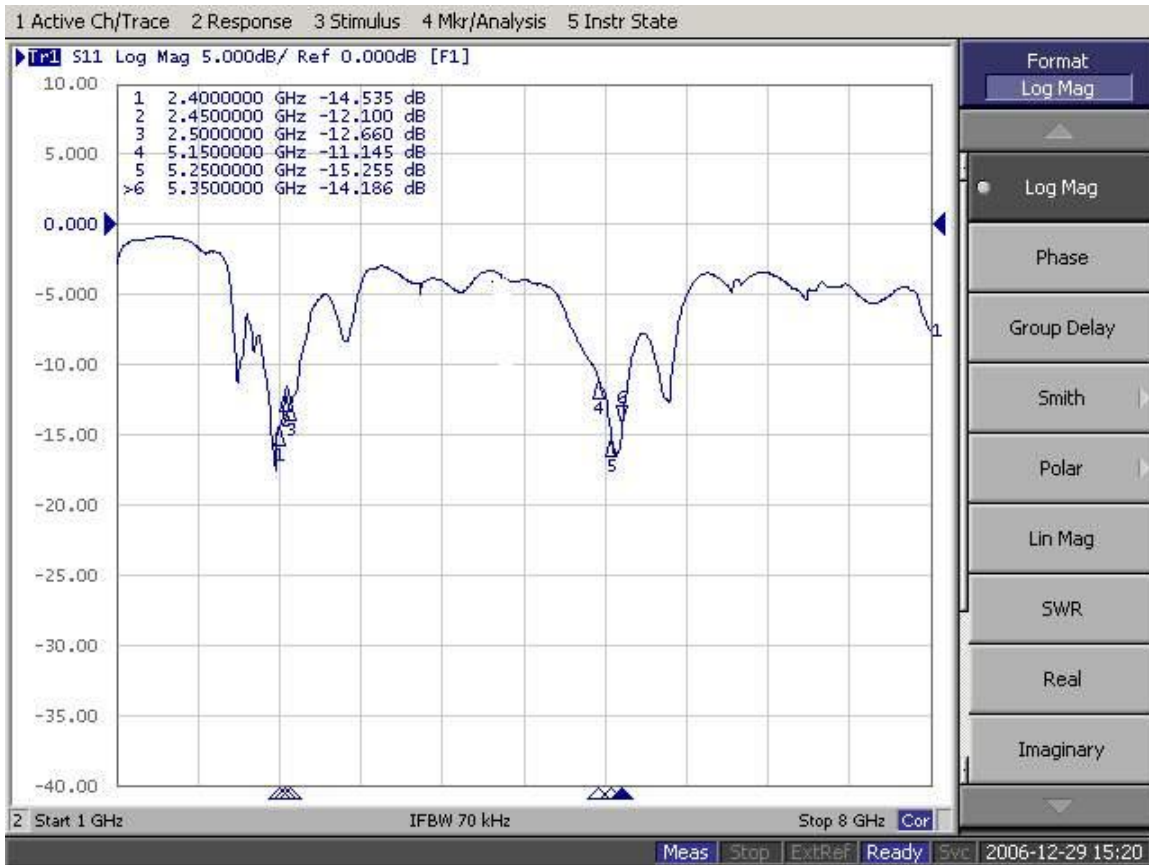
The PC14.03.3000D is a high performance wireless antenna for internal use in Wi-Fi or WLAN equipment worldwide. Omni-directional gain across both bands ensures constant reception and transmission. Its compact size and high performance make it ideal for integration into today’s devices. Cable and connector are fully customizable.

2. Specification

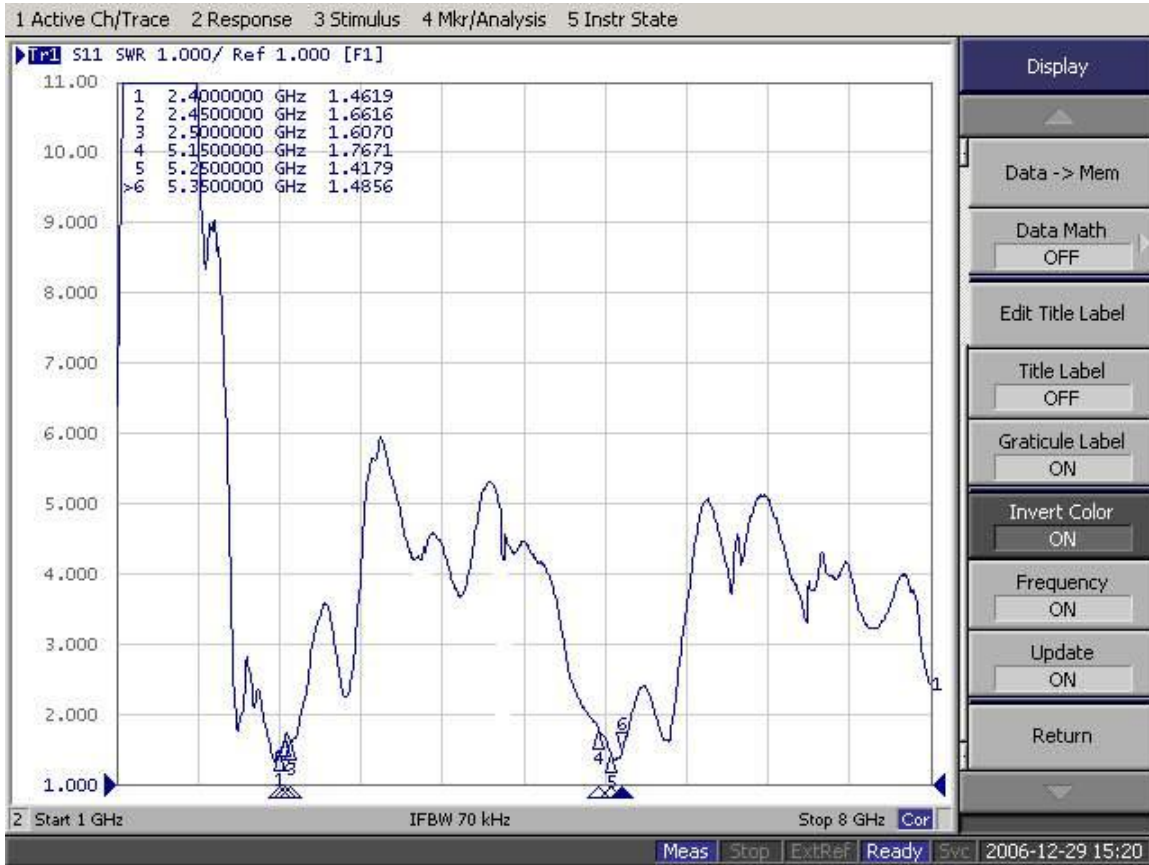
Parameter	Multi-Standard					
Communication System						
Frequency Range (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
VSWR	1.46	1.66	1.60	1.76	1.41	1.48
Return Loss	-14.53	-12.1	-12.66	-11.14	-15.25	-14.18
Impedance	50 Ohms					
Radiation	Omni					
Polarization	Horizontal					
MECHANICAL						
Dimensions	Ø42mm*0.8 mm					
Connector	RP-SMA(M)					
Cable Standard	RG-174					
ENVIRONMENTAL						
Operation Temperature	-40 °C ~ +85 °C					
Storage Temperature	-40 °C ~ +85 °C					
RoHS Compliant	Yes					

3. Antenna performance

3.1. Return Loss

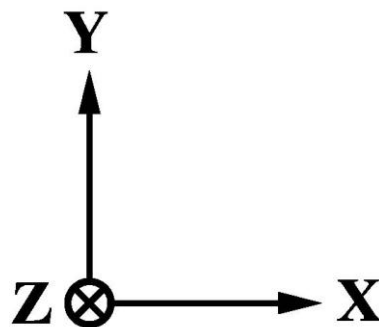


3.2. VSWR

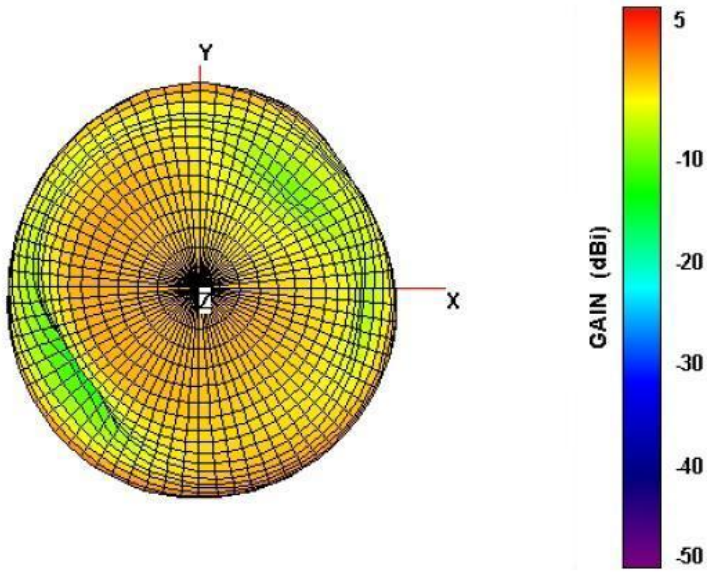


4. Radiation Property

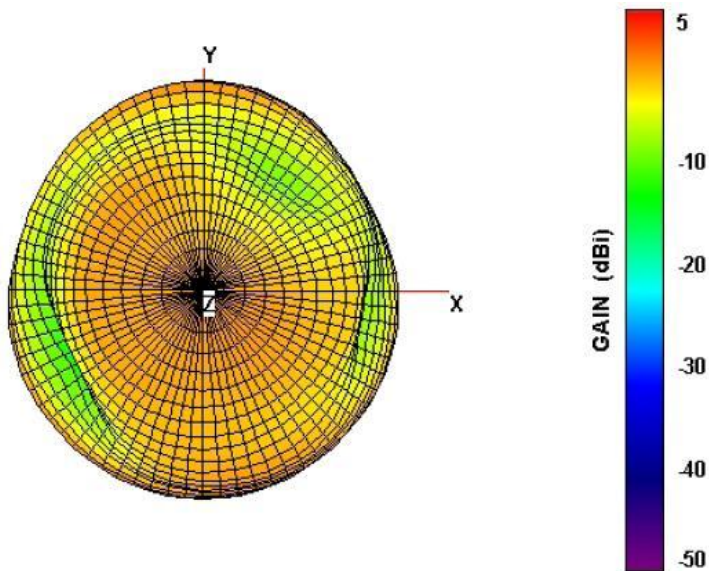
4.1. 3D Radiation Patterns



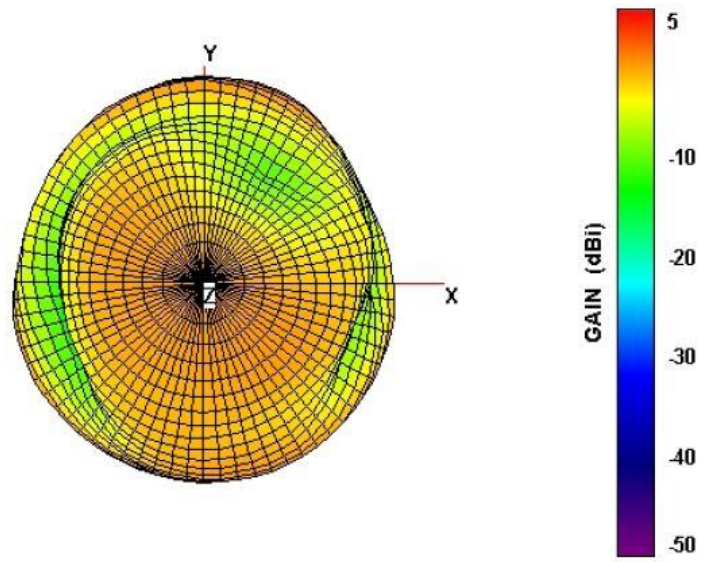
2.4GHz



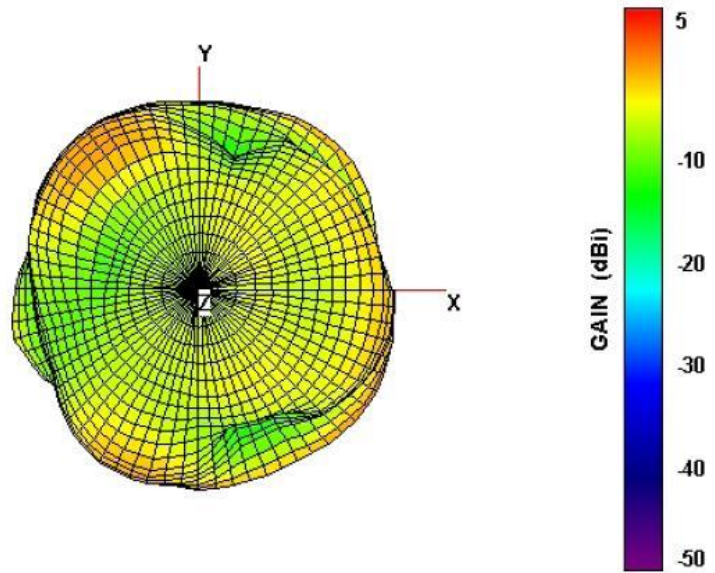
2.45GHz



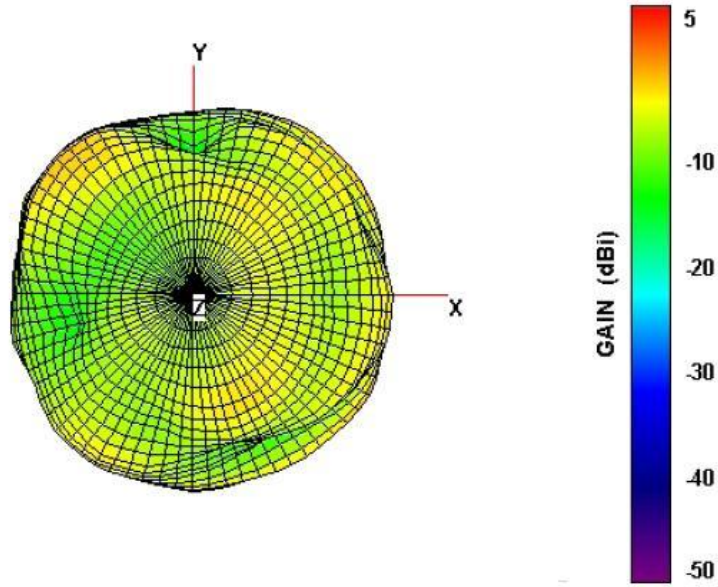
2.5GHz



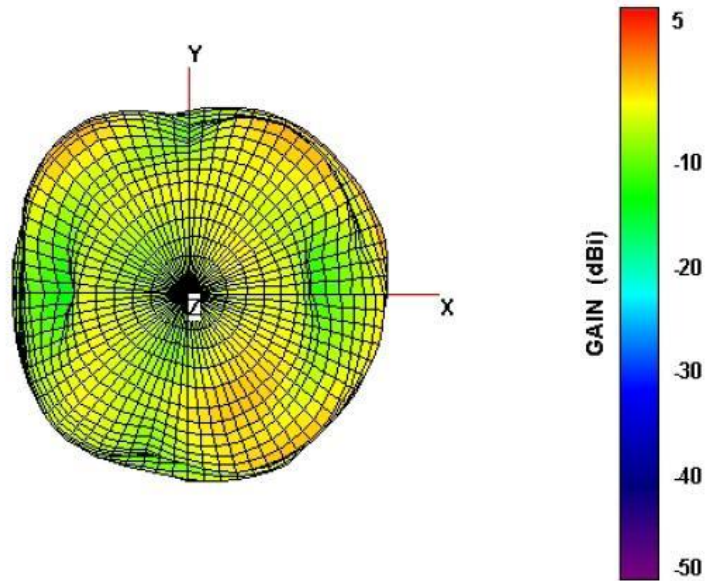
5.15GHz



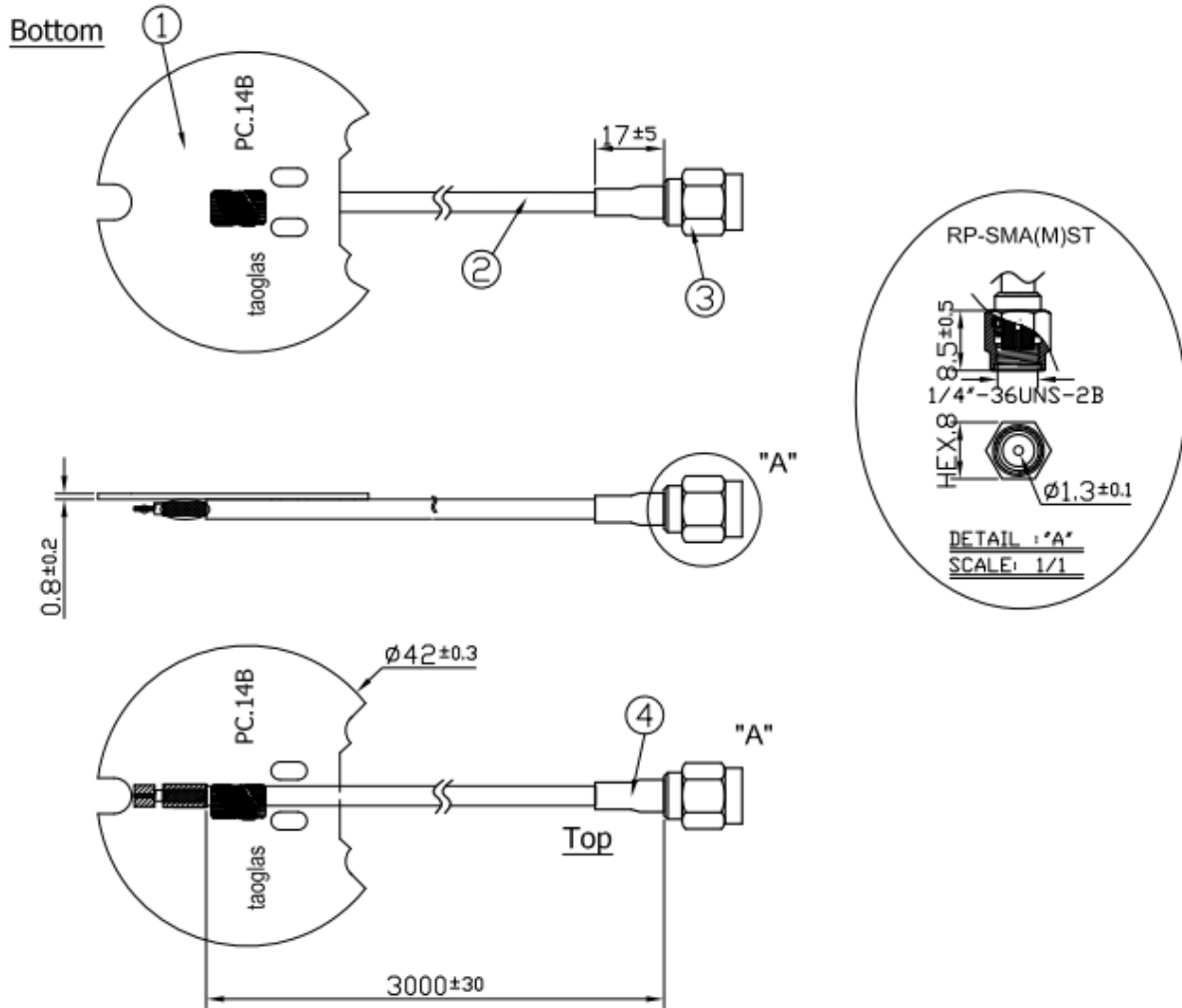
5.25GHz




5.35GHz



5. Antenna Drawing



NOTES:

- 1.No dregs or insufficient soldering. Solder thickness 0.3~1.7mm
- 2.The solder must be smooth and full to the edges of the pad.
The solder must not extend outside of the pad area.
- 3.The connector position has special orientation to the PCB as per drawing.
- 4.All material must be RoHS compliant.
- 5.Open/short QC, VSWR required.
- 6.Soldered area. 

	Name	P/N	Material	Finish	QTY
1	PC.14B PCB	PC.14B PCB	FR4 0.8t	Black	1
2	RG174	RG174.AD	PVC	Black	1
3	RP-SMA(M)ST	SMA.M.RP.ST.PLUG.D.AD	Brass	Gold	1
4	Heat Shrink Tube	001311F0000XXA	PE	Black	1