

Antenna

EX20027 Datasheet

Antenna Services

Version:1.0

Date: 2025-10-17

Status: Released



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Overall Performance

1)Test Environment

The Gain, Efficiency, Directivity and 2/3D Pattern

3D Anechoic Chamber

Testing range from 300MHz to 8.5GHz

Chamber Room Size: L*W*H=9*4.7*4.7 M

VSWR

Testing range from 300KHz~8.5GHz

Network Analyzer(Agilent-E5071C or R&S ZVL)

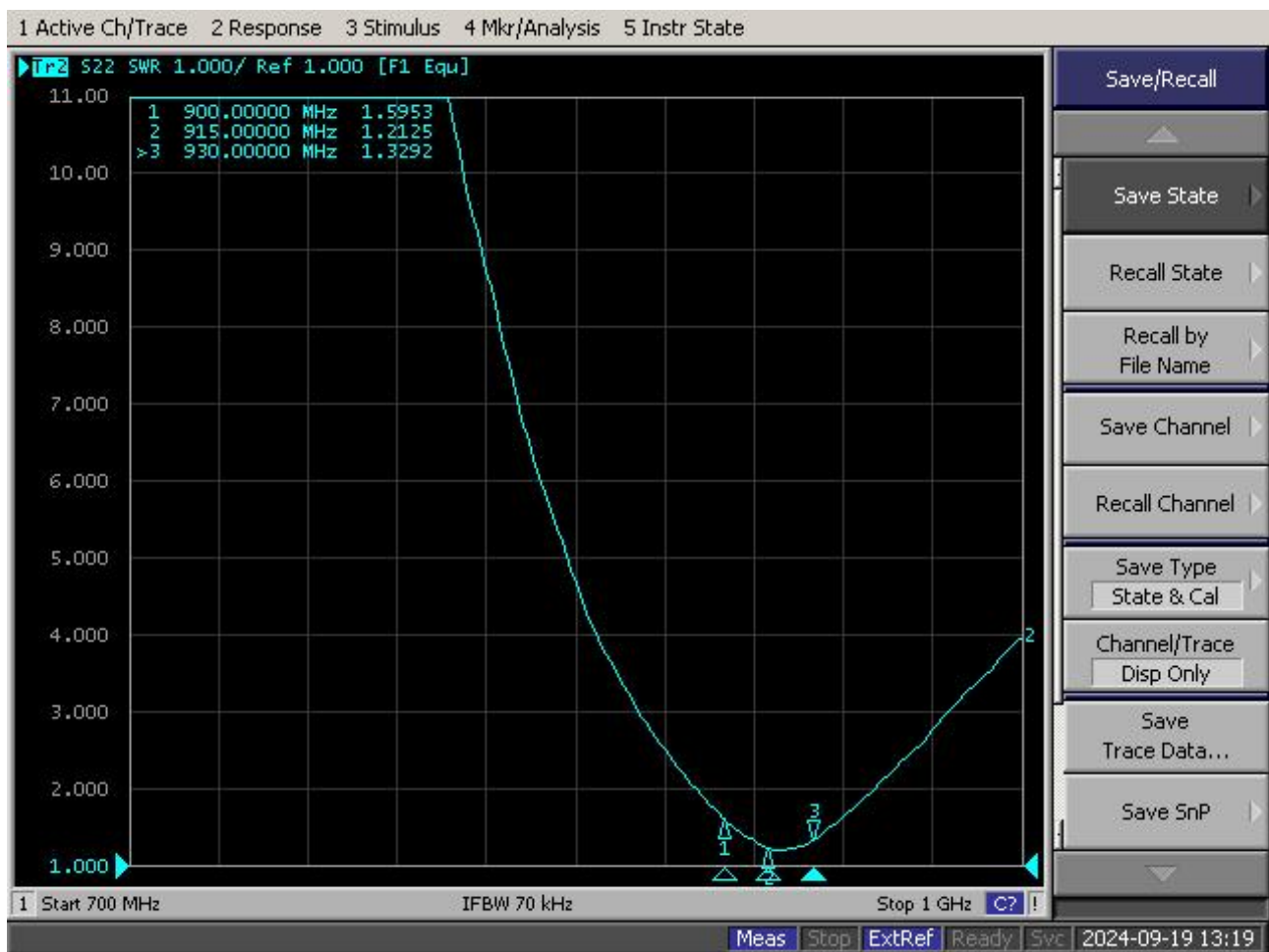


2) Product Specifications

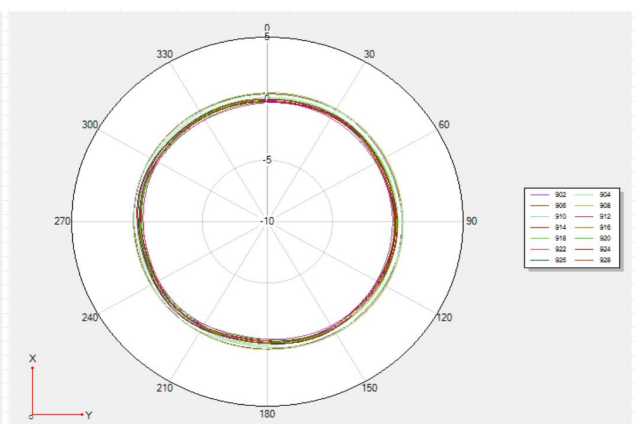
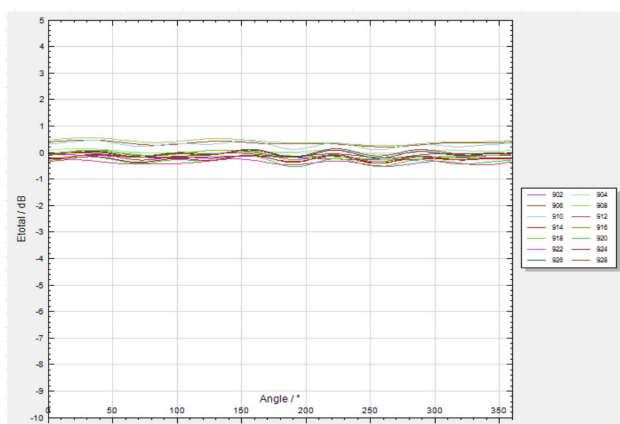
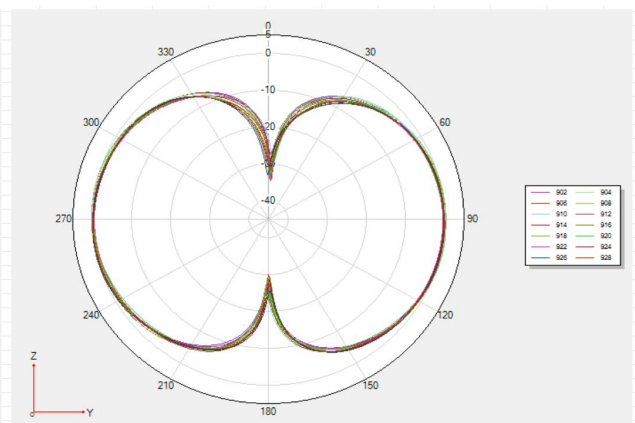
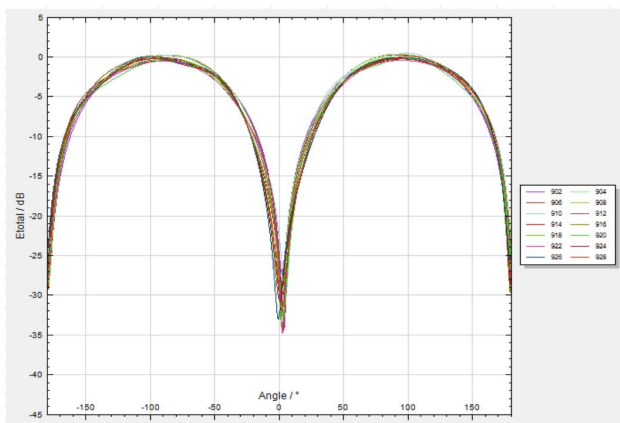
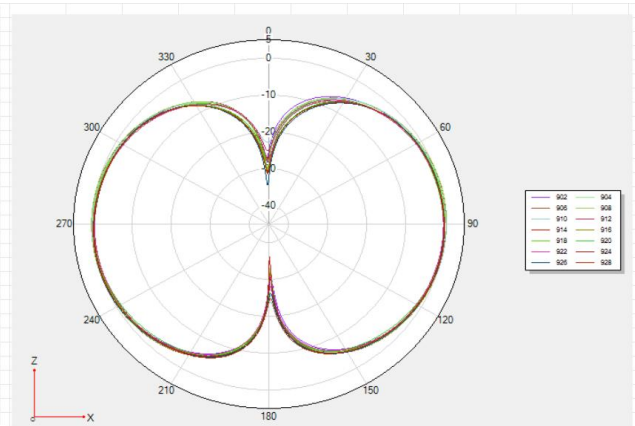
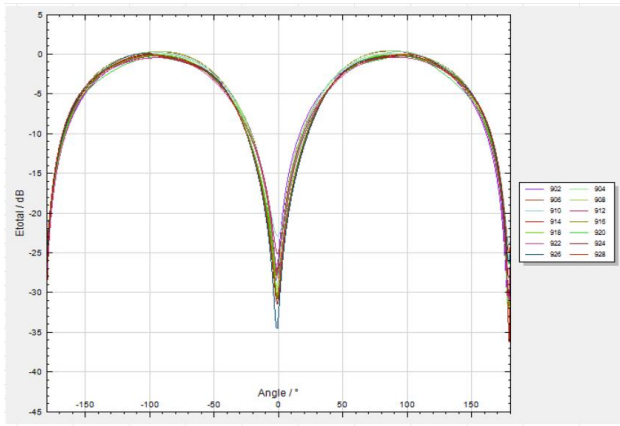
Electrical Specifications	
Model	EX20027
Frequency band	902~928MHz
Gain	1dBi
Horizontal Beamwidth	360°
VSWR	≤1.92
Ovality	≤2dB
Impedance	50Ω
Polarization	Vertical
Max. Power	50W
Lightning Protection	Dc ground
Connector	SMA-Male
Mechanical Specifications	
Dimension(mm)	φ10*102 mm
Weight(kg)	0.01Kg
Internal material	Copper tube
Radome Color	Black
Radome material	TPEE
Operating temperature	-40~55℃

3) VSWR

Frequency (MHz)	900	915	930
VSWR	1.5953	1.2125	1.3292



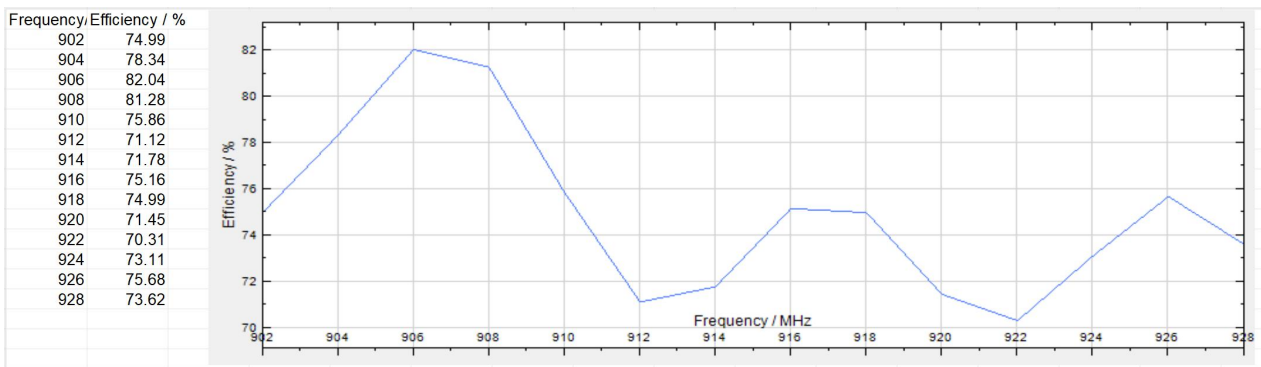
4) Antenna 2D Report



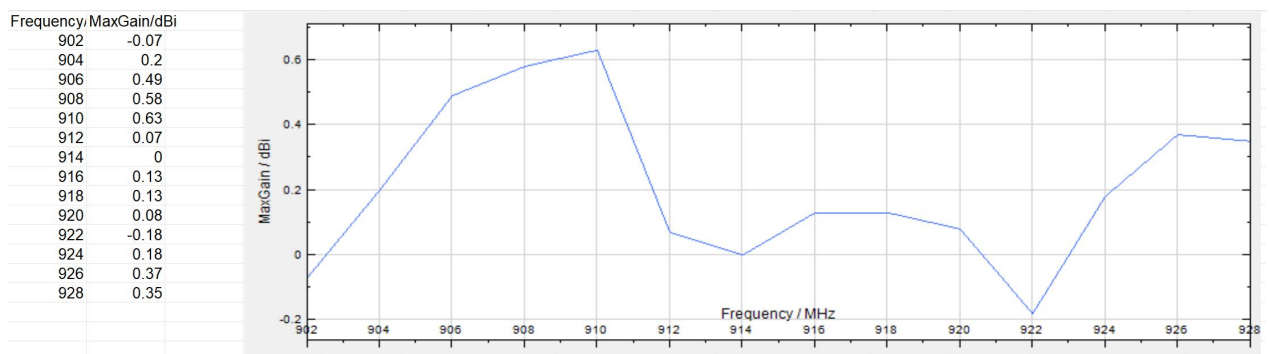
5) Total Efficiency& Gain:

Frequency(MHz)	Gain(dBi)	Efficiency(%)
902	-0.07	74.99
904	0.2	78.34
906	0.49	82.04
908	0.58	81.28
910	0.63	75.86
912	0.07	71.12
914	0	71.78
916	0.13	75.16
918	0.13	74.99
920	0.08	71.45
922	-0.18	70.31
924	0.18	73.11
926	0.37	75.68
928	0.35	73.62

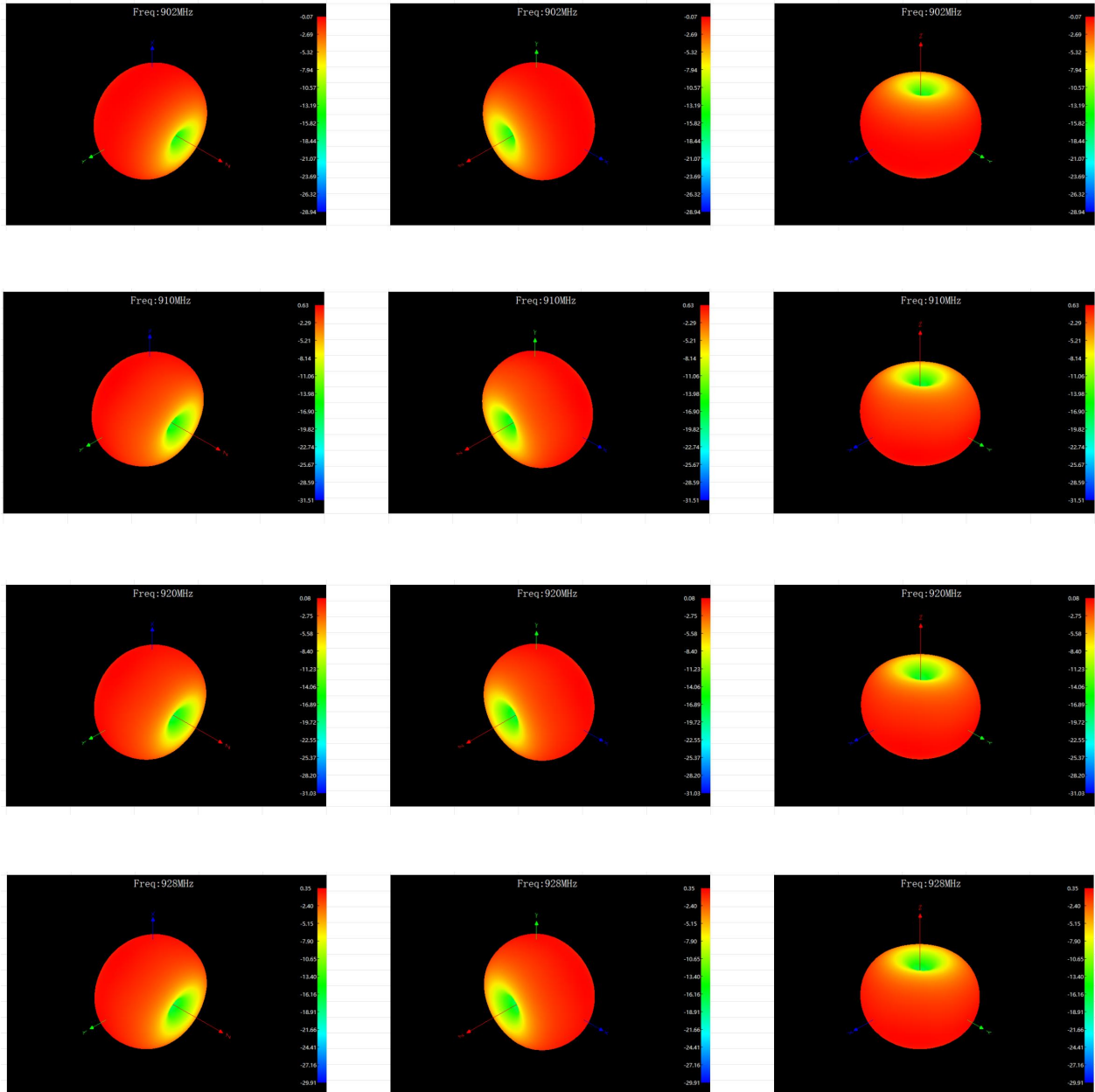
Antenna Efficiency



Peak Gain



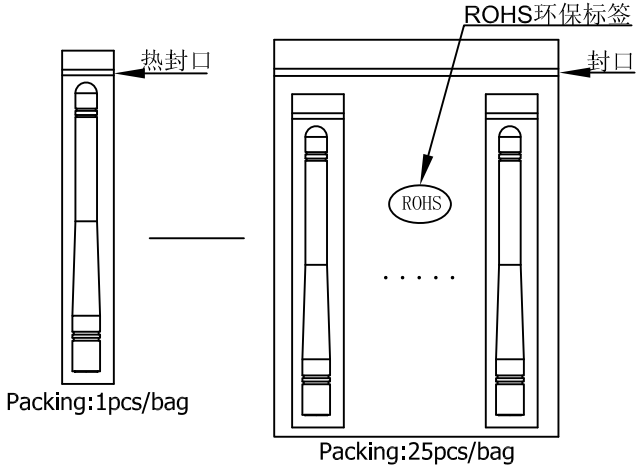
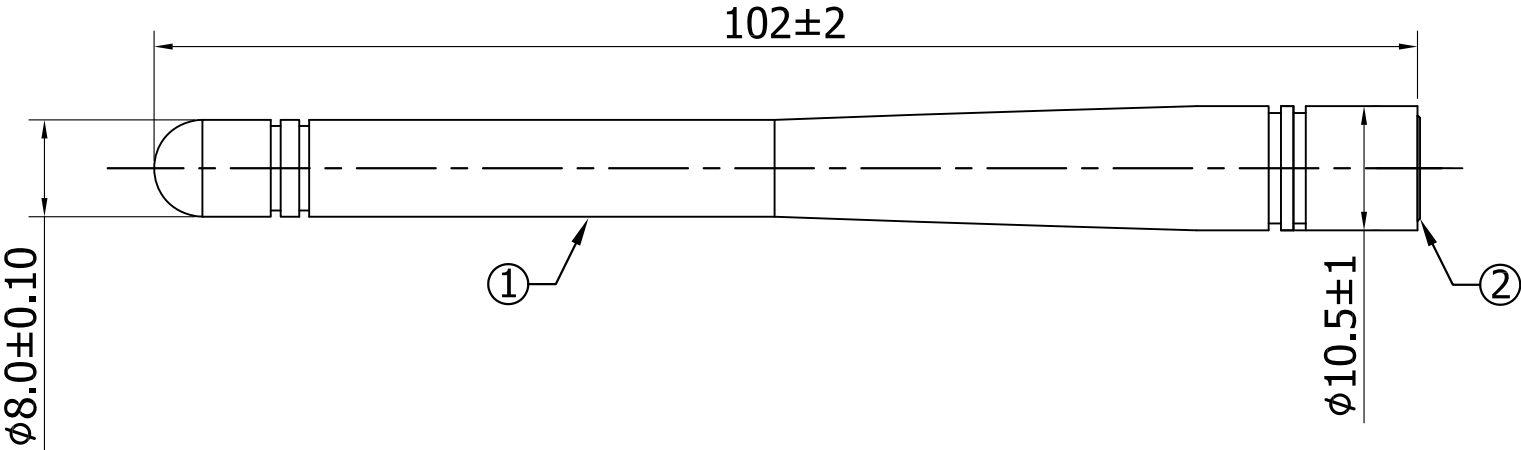
6) Antenna 3D Report



Drawing

REV.	DESCRIPTION	DATE
A	New	2025.10.17

ROHS



- 1.1PCS/ROHS label shall be affixed to the outer carton label
2.The outer carton shall be labeled with 1PCS/ outer carton on the upper right corner of the outer carton

Specification:
Frequency Rang:902~928MHz
Return Loss:-10dB or less
VSWR:1.92 Max
Gain:1.0 dBi

2	Connector	SMA Straight Plug Reverse for RG-178	1	
1	Antenna Cap	TPEE,Color:Black	1	
NO	DESCRIPTION		Q'TY	REMARK

TITLE:		Φ 10.0 ANTENNA		Shenzhen Keesun Technology Co.,Ltd			
P/N:		EX20027					
CUSTOMER:							
DRAW NO.:							
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED						APPROVED	
一般公差 TOLERANCE		.XXX	±0.05			XX.	±1.0
		.XX	±0.1			DRAINED	Julia
		.X	±0.2				
		X.	±0.5				
				SHEET: 1/1	SCALE: 1:1		
				UNIT: mm	REV.X1		