KEESUN
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Antenna
EX20215 Datasheet

Antenna Services

Version:1.0

Date: 2026-11-03

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)



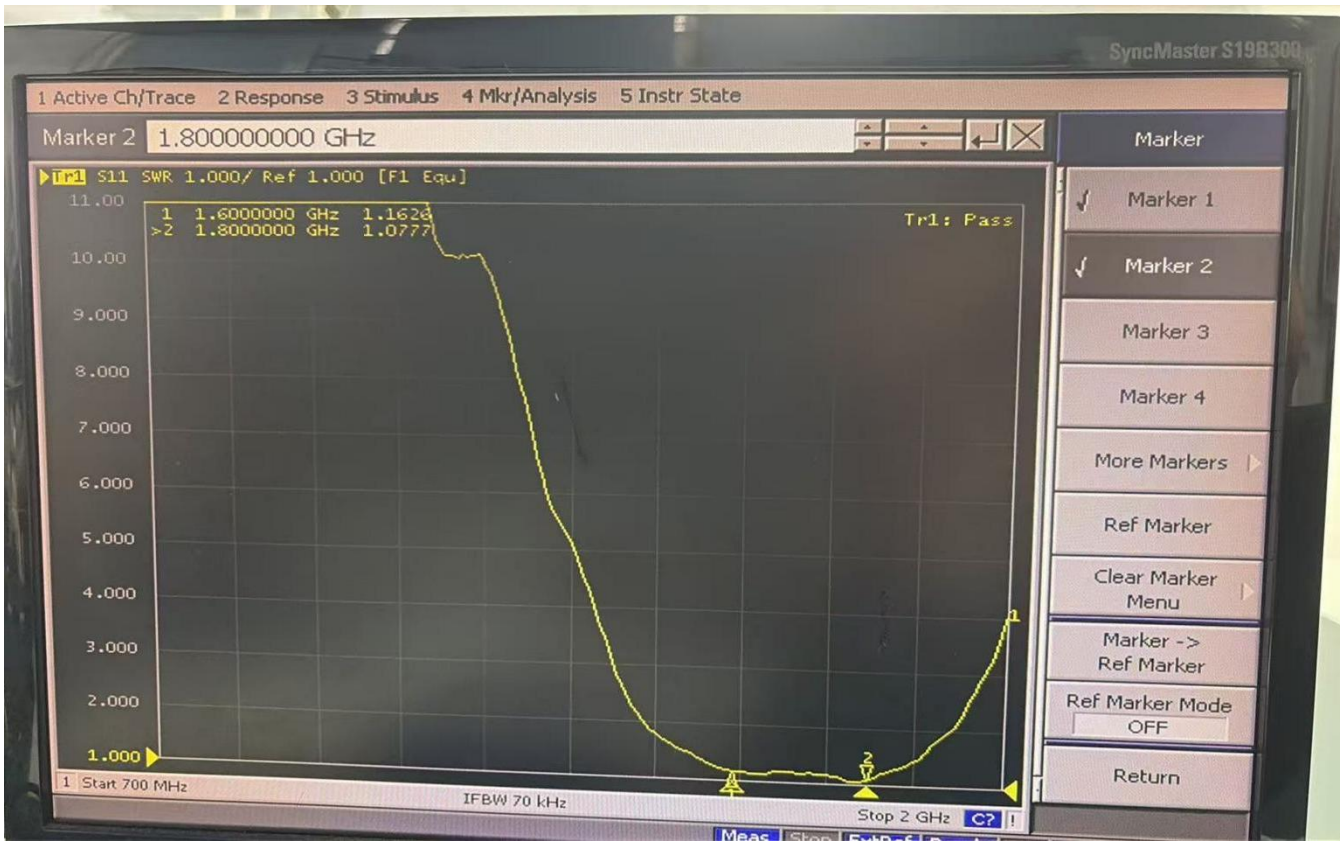


2) Product Specifications

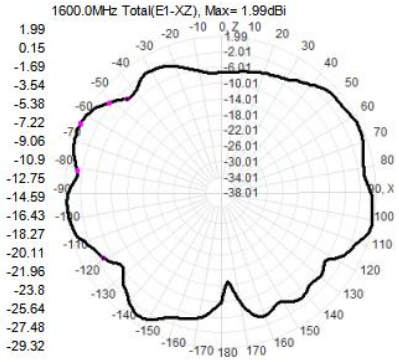
Electrical Specifications	
Model	EX20215
Frequency band	1600~1800MHz
Gain	2dBi
Horizontal Beamwidth	360º
VSWR	≤1.92
Ovality	≤2dB
Impedance	50Ω
Polarization	Vertical
Max. Power	50W
Lightning Protection	Dc ground
Connector	SMA-male
Mechanical Specifications	
Dimension(mm)	¢13*140 mm
Weight(kg)	0.02Kg
Internal material	Copper tube
Radome Color	Black
Radome material	ABS
Operating temperature	-40～55℃

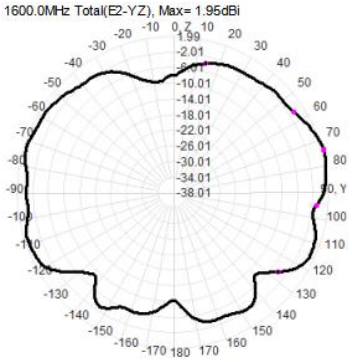
3) VSWR

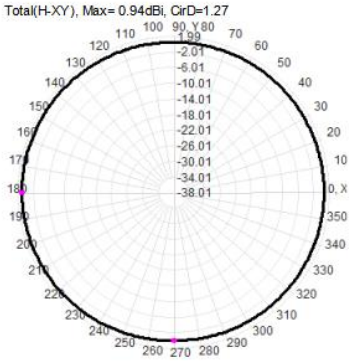
Frequency (MHz)	1.6	1.8
VSWR	1.1626	1.0777

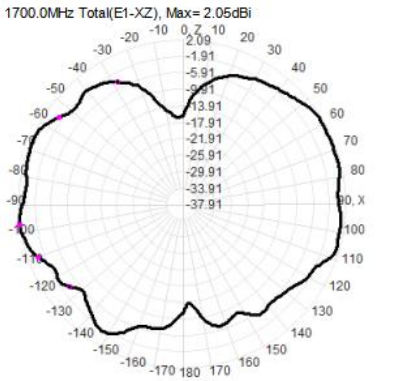


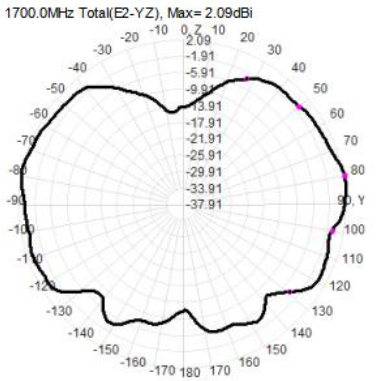
4) Antenna 2D Report

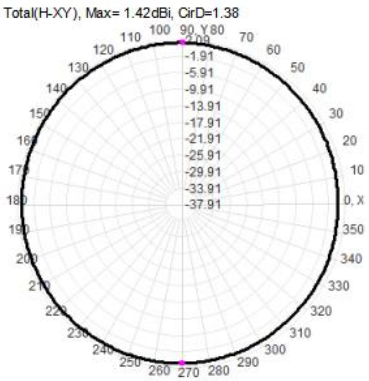


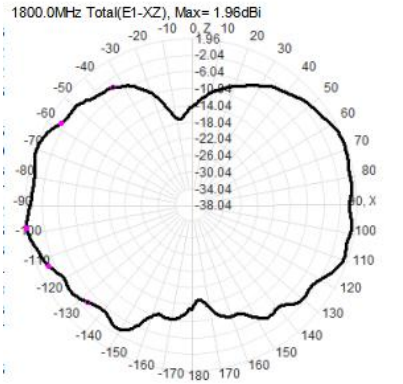


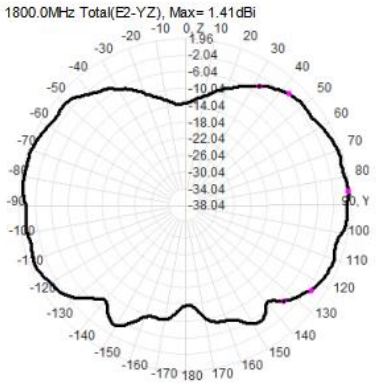


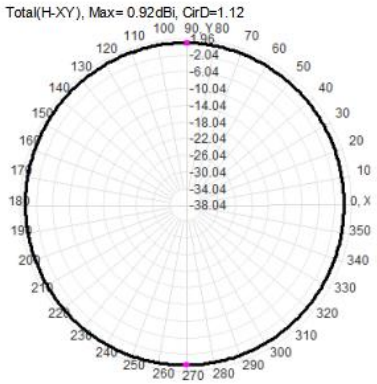






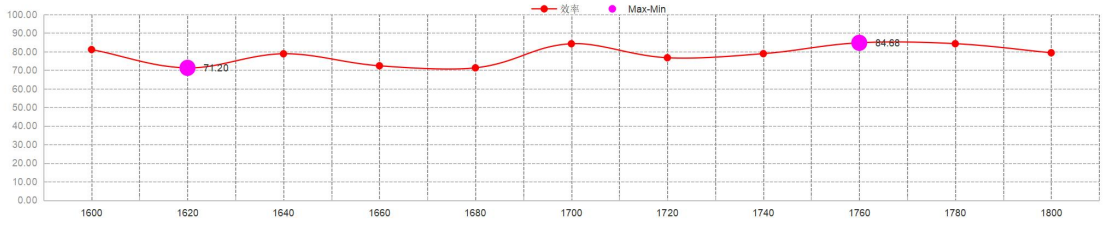


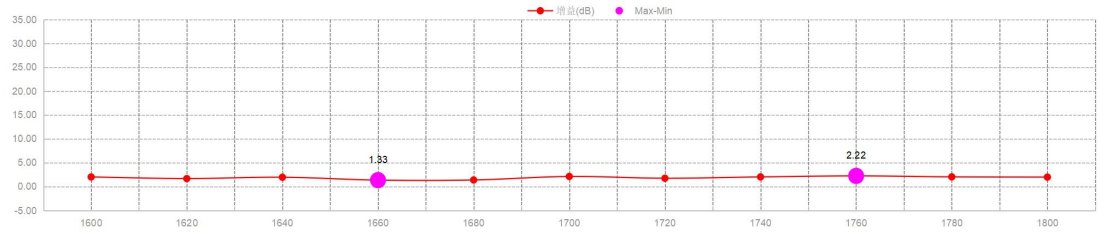


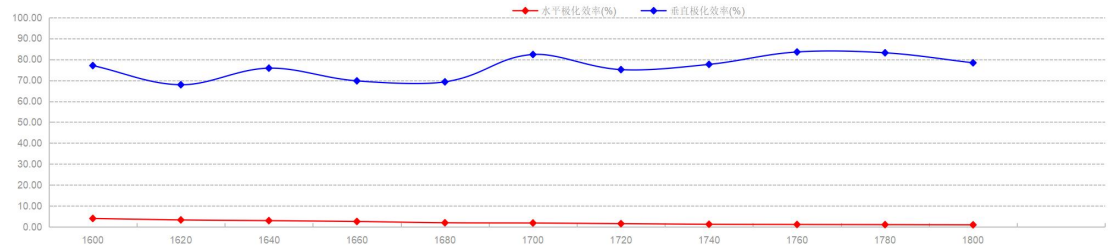


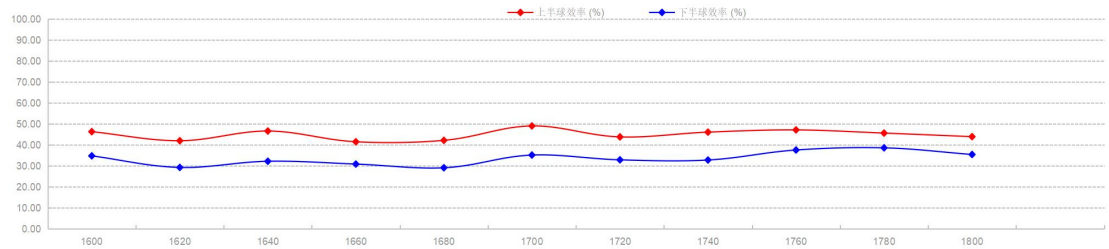
5) Total Efficiency& Gain:

序号	1	2	3	4	5	6	7	8	9	10	11
频率(MHz)	1600	1620	1640	1660	1680	1700	1720	1740	1760	1780	1800
效率 (dBi)	-0.91	-1.48	-1.04	-1.41	-1.47	-0.75	-1.15	-1.03	-0.72	-0.75	-1.01
增益 (dBi)	1.99	1.66	1.94	1.33	1.36	2.09	1.72	2.00	2.22	2.01	1.96
效率 (%)	81.05	71.20	78.78	72.32	71.22	84.17	76.65	78.85	84.68	84.21	79.33
方向性(dB)	2.90	3.13	2.97	2.74	2.83	2.84	2.88	3.04	2.94	2.76	2.97
最大增益位置(theta)	64.00	65.00	66.00	79.00	80.00	80.00	97.00	97.00	97.00	97.00	98.00
最大增益位置(Phi)	180.00	180.00	180.00	90.00	90.00	90.00	180.00	180.00	180.00	180.00	180.00
水平极化效率(%)	4.03	3.33	2.99	2.59	1.98	1.86	1.55	1.26	1.16	1.08	0.98
垂直极化效率(%)	77.02	67.87	75.79	69.73	69.24	82.31	75.10	77.59	83.52	83.13	78.34

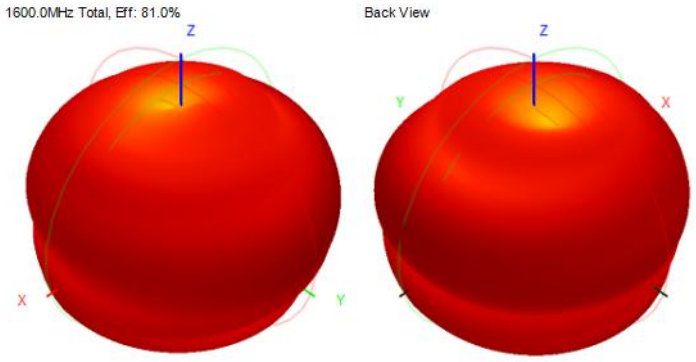


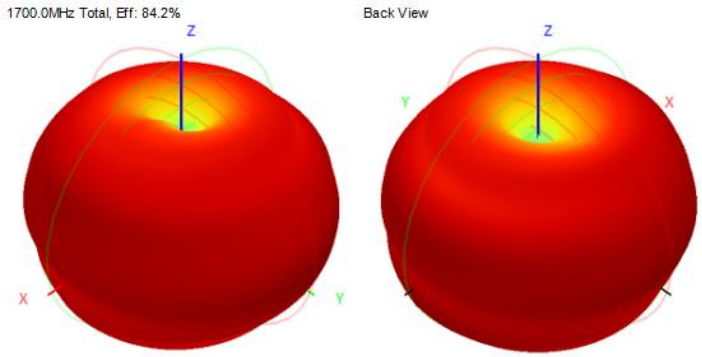


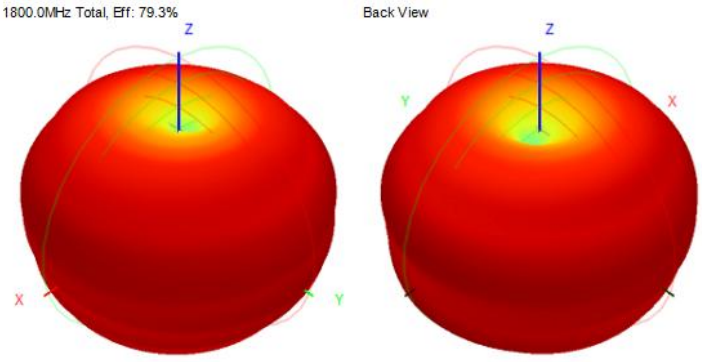




6) Antenna 3D Report



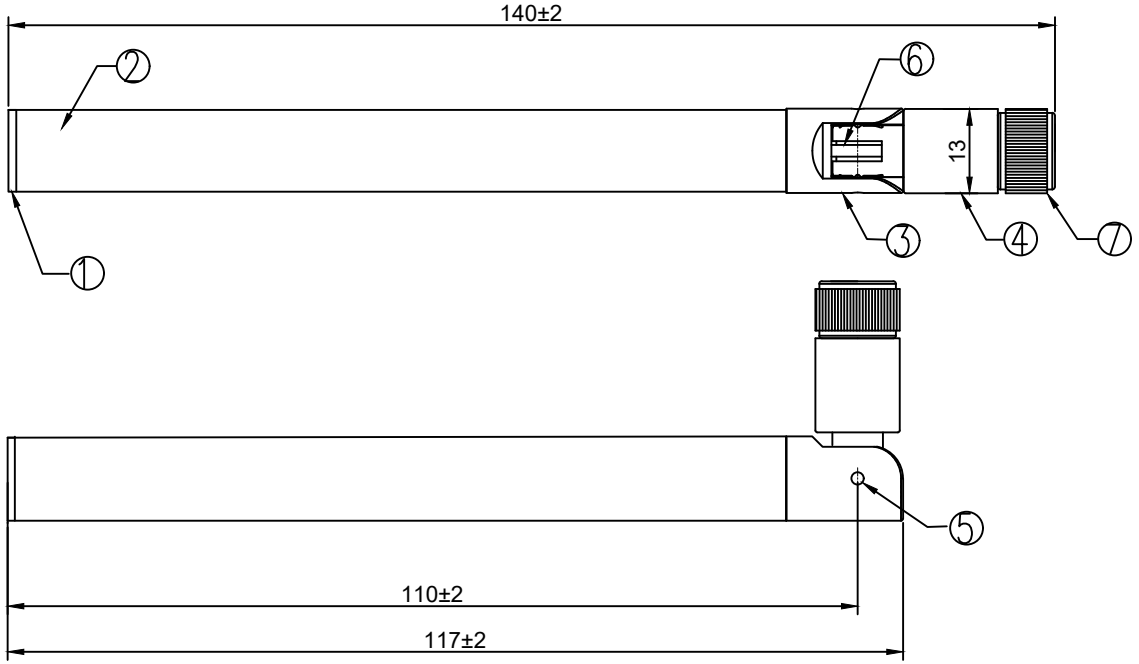


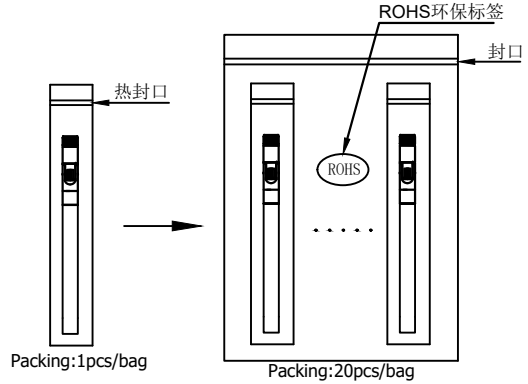


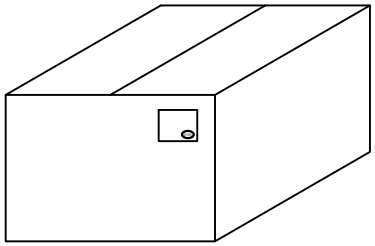
Drawing

REV.	DESCRIPTION	DATE
X1	New	2026.11.03

ROHS







1.外箱需贴1PCS/ROHS标签于外箱标签上
2.外箱需贴1PCS/外箱标签于外箱侧麦右上角

Specification:
Frequency Rang:1600-1800MHz
Return Loss:-10dB or less
VSWR:1.92Max
Gain:2.0dBi

NO.	DESCRIPTION		Q'TY	REMARK
7	Connector	Big SMA Jack Standard for RG-178	1	
6	Cable	RG178 Cable,Brown,50Ω	1	
5	Rivet	PBT+PC,Color:Black	2	
4	Bottom Base	PBT+PC,Color:Black	1	
3	Upper Base	PBT+PC,Color:Black	1	
2	Fiberglass tube	fiberglass,Color:Black	1	
1	Antenna Cap	ABS,Color:Black	1	

TITLE:	1600-1800MHz SMA Antenna				
P/N:	EX20215				
CUSTOMER:					
DRAW NO.:					
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED					
一般公差 TOLERANCE	.XXX ±0.05	XX. ±1.0	SHEET: 1/1	SCALE: 1:1	APPROVED
	.XX ±0.1				CHECKED
	.X ±0.2		UNIT: mm	REV.X1	DRAWED: Fred
	X. ±0.5				

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