

DRA2G5GD002 Specification

5dBi Dual band Dipole Antenna

1. Feature

- * External type dipole antenna
- * 2.4GHz/5GHz of frequency
- * SMA Plug interface
- * Plastic rod of black
- * RoHS compliance

2. Application

- * 2.4GHz/5GHz Wireless Communication
- * WLAN device, WLAN Router, e.g., AP, PIC Wireless Card

3. Description

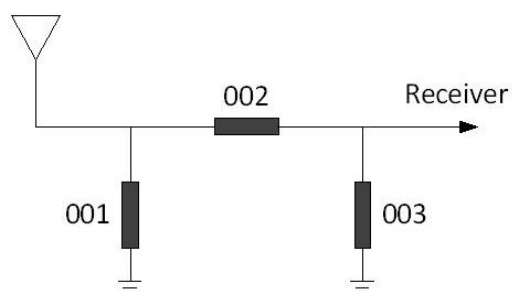
This miniature antenna is designed for 2.4GHz/5GHz applications and can be easily built-in portable devices with MHF processes. It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

4. General Data

Product Name	5dBi Dual band Dipole Antenna
Part No.	DRA2G5GD002
Frequency	2.4~2.5GHz&5.15~5.85GHz
V.S.W.R	≤2.0
Gain (dBi)	2.4GHz@3.0dBi 5GHz@5.0dBi
Polarization	Linear, Vertical
Storage Temp	-10℃~+70℃
Operating Temperature	-10℃~+60℃
Impedance with Matching	50 Ω
Weight	21.5 g
Antenna Type	SMA PLUG
Dimension	L218.5 X Φ 13 (mm)

5. Typical Electrical Characteristics

- Recommend Matching Circuit



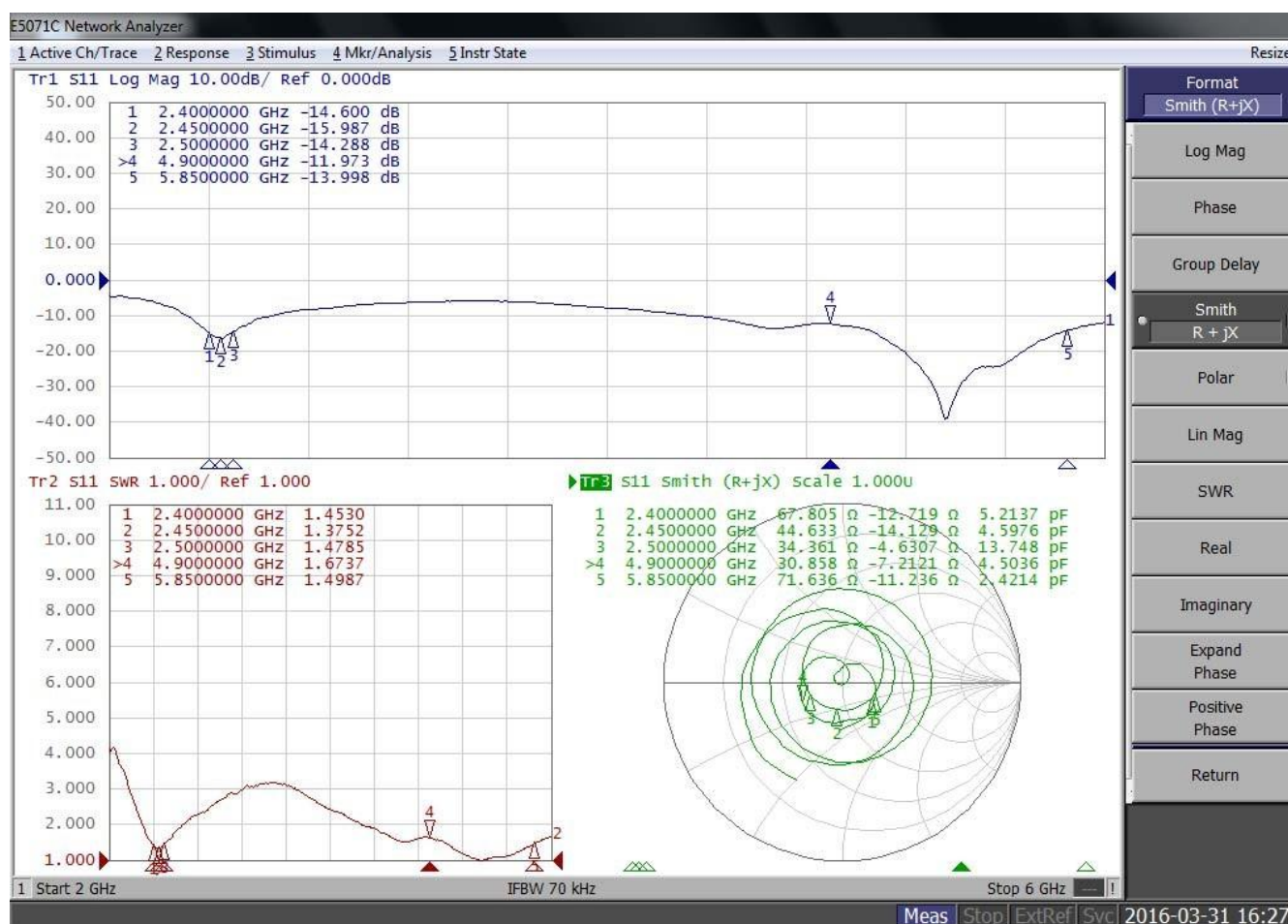
Reference:

001=(N/A)

002=0 Ω

003=(N/A)

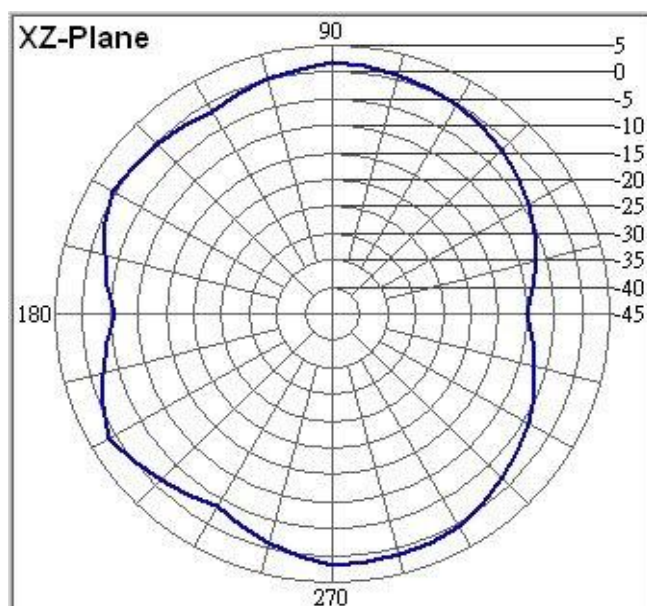
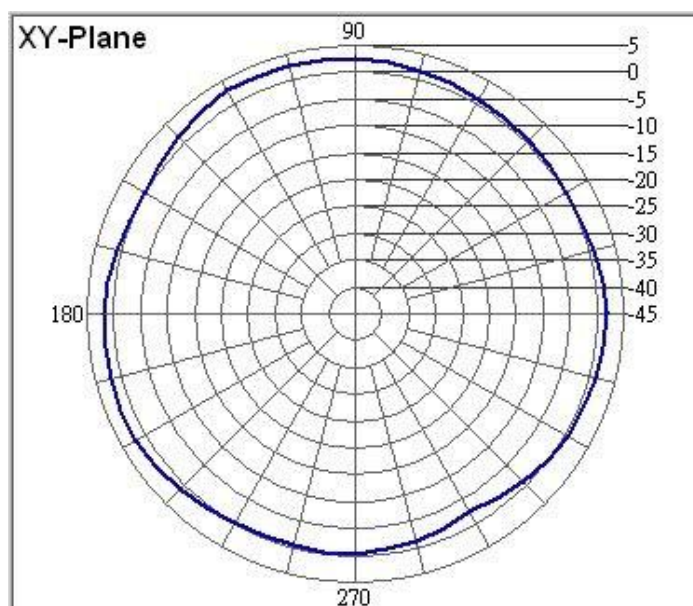
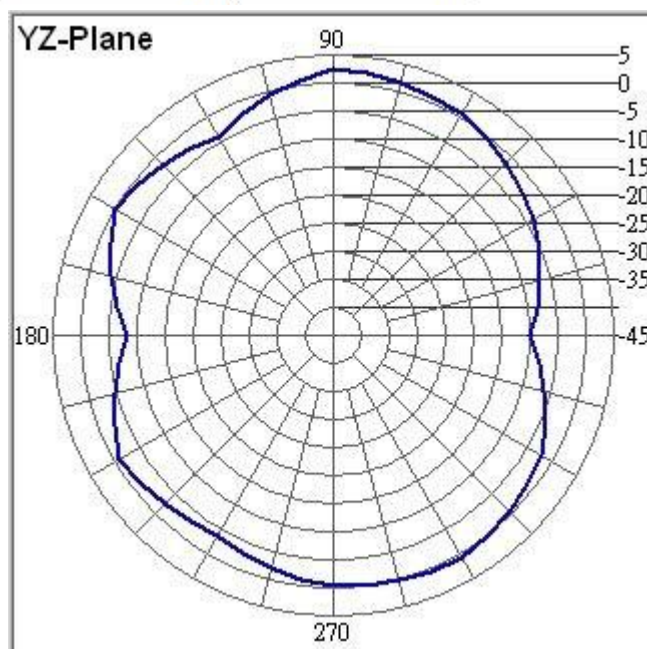
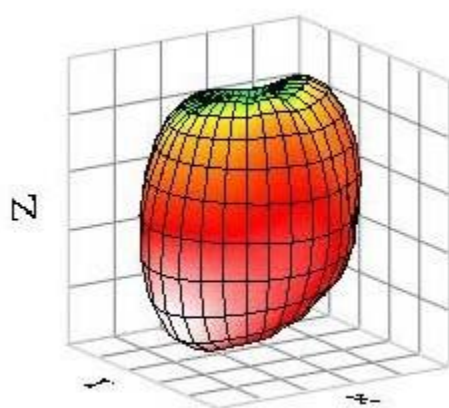
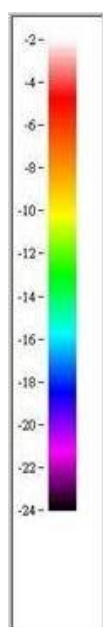
- Return loss、VSWR& Smith chart



➤ Gain (dBi)

Frequency = 2400 MHz

dBm	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	2.533257	1.847384	2.388772
V-Pol. (Peak.)	-7.394141	-7.528106	-9.612384
H+V. (Peak.)	2.953834	1.910461	2.457024
H-Pol. (Avg.)	1.017205	-0.925111	-1.617949
V-Pol. (Avg.)	-14.255253	-13.671993	-12.570356
H+V. (Avg.)	1.144312	-0.700305	-1.282473
Angle	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	120	270	90
V-Pol. (Peak.)	120	180	60
H+V. (Peak.)	120	270	90

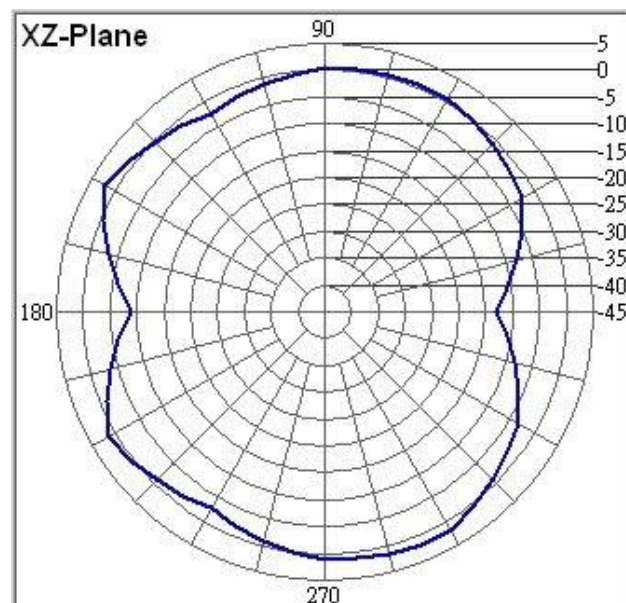
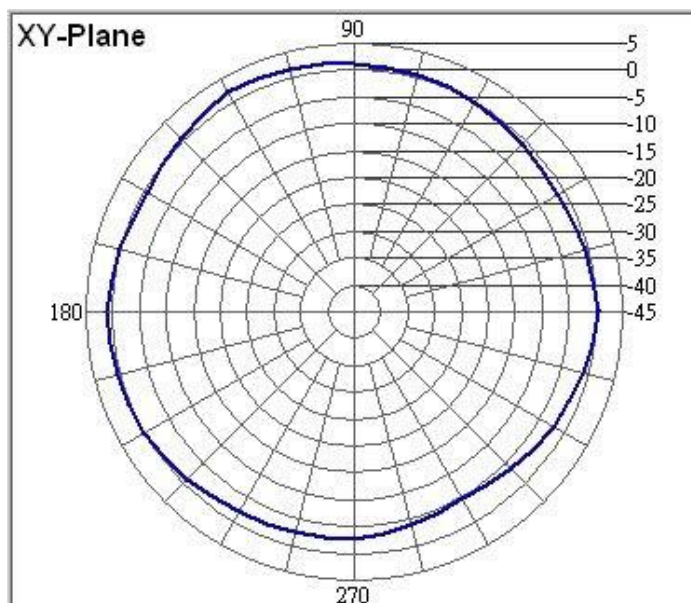
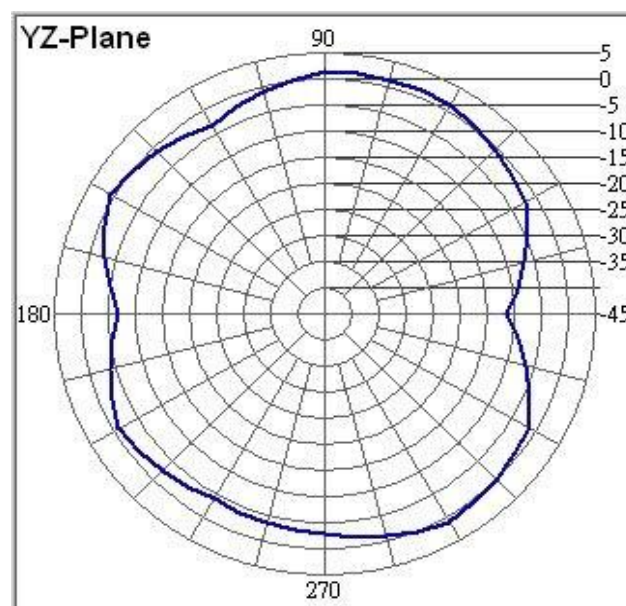
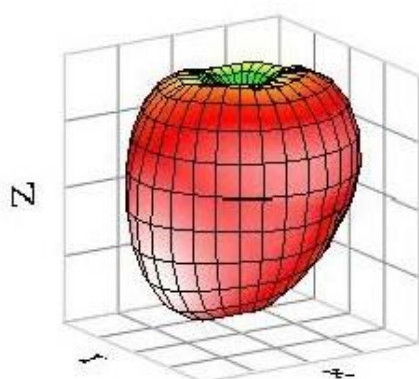
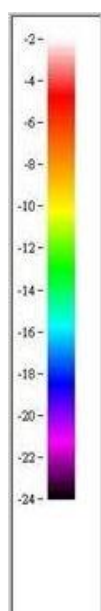


High performance product for you

➤ Gain (dBi)

Frequency = 2450 MHz

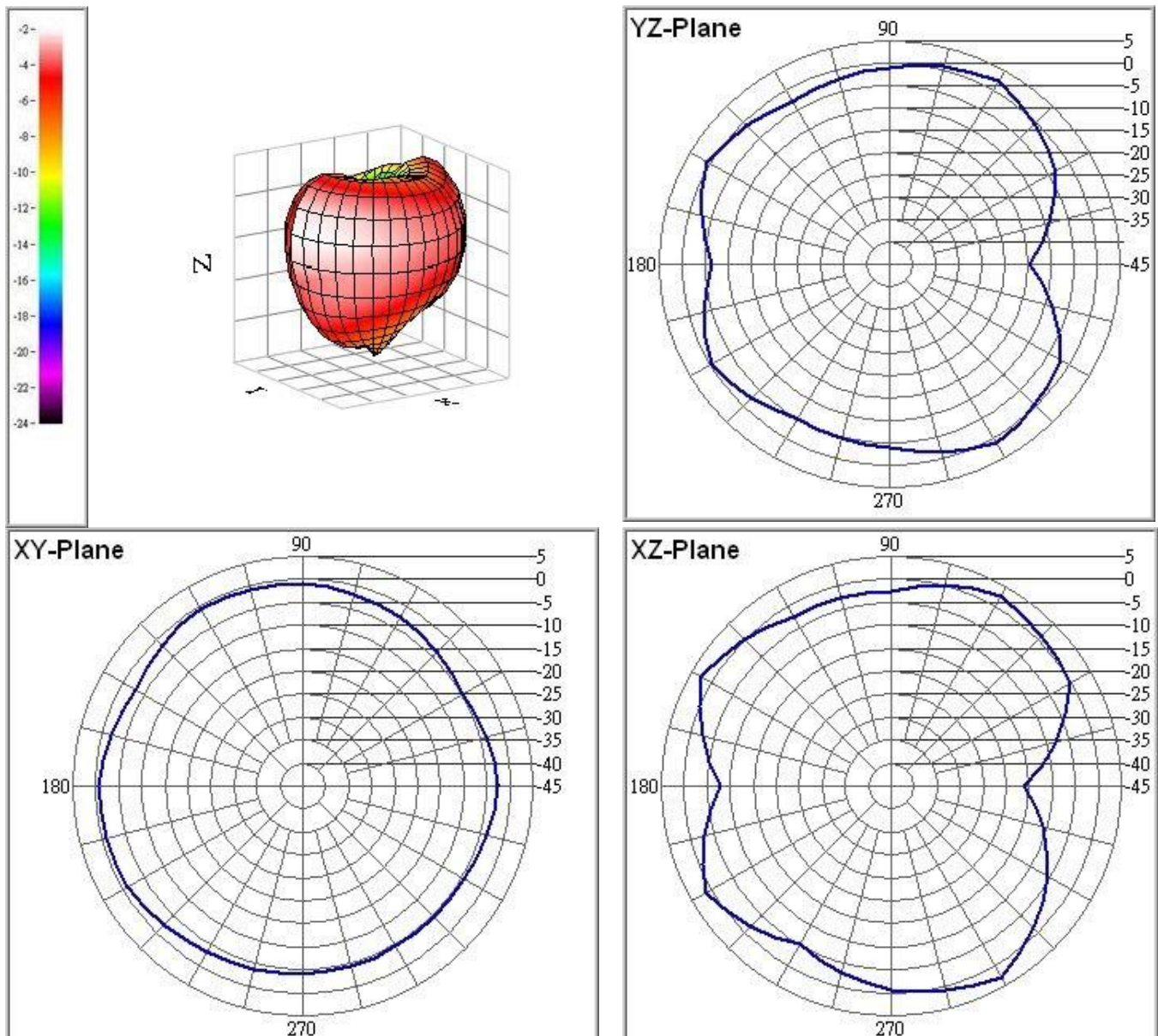
dBm	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	1.888438	2.06223	1.141488
V-Pol. (Peak.)	-9.899412	-6.802034	-7.578233
H+V. (Peak.)	2.167047	2.379037	1.342182
H-Pol. (Avg.)	-0.46296	-0.795769	-1.804188
V-Pol. (Avg.)	-16.023059	-12.487565	-10.848453
H+V. (Avg.)	-0.343888	-0.51113	-1.294145
Angle	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	120	300	90
V-Pol. (Peak.)	120	150	300
H+V. (Peak.)	120	150	90



High performance product for you

- **Gain (dBi)**
Frequency = 2500 MHz

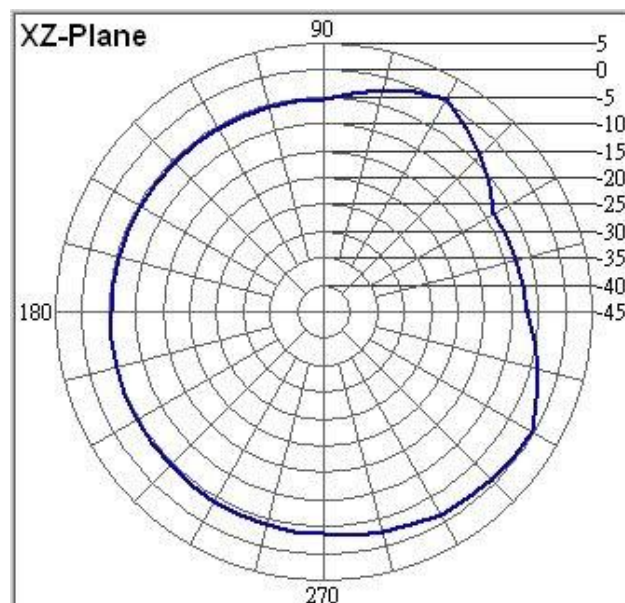
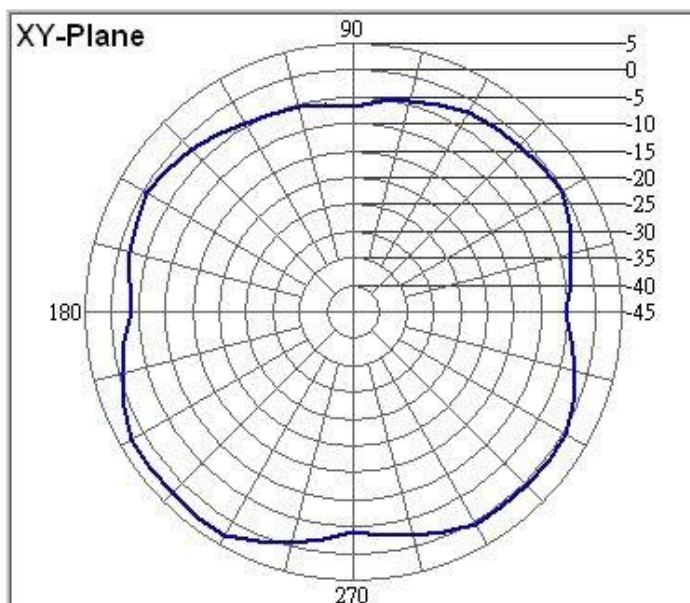
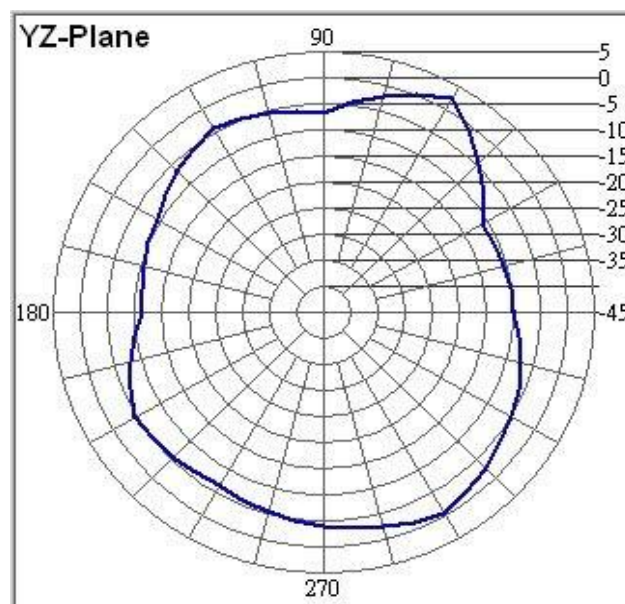
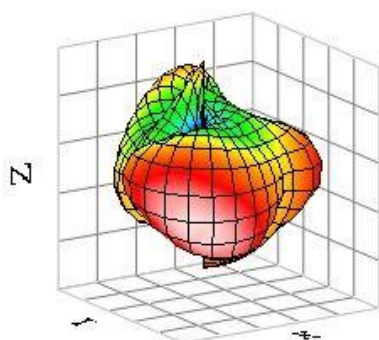
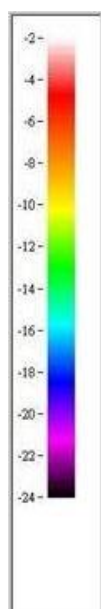
dBm	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	-0.694667	2.862597	2.215434
V-Pol. (Peak.)	-11.087523	-7.270118	-7.499572
H+V. (Peak.)	-0.315021	3.006369	2.352811
H-Pol. (Avg.)	-2.600478	-0.771349	-1.903437
V-Pol. (Avg.)	-16.759422	-11.480948	-11.744287
H+V. (Avg.)	-2.436914	-0.417347	-1.474798
Angle	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	120	300	60
V-Pol. (Peak.)	120	210	300
H+V. (Peak.)	120	300	60



➤ Gain (dBi)

Frequency = 5150 MHz

dBm	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	2.907052	0.593259	2.332601
V-Pol. (Peak.)	-6.618532	-6.104913	-9.010549
H+V. (Peak.)	3.041484	0.819128	2.460234
H-Pol. (Avg.)	-0.977351	-4.049478	-4.62191
V-Pol. (Avg.)	-11.861793	-11.83227	-11.792595
H+V. (Avg.)	-0.636786	-3.380193	-3.859743
Angle	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	240	60	60
V-Pol. (Peak.)	150	300	270
H+V. (Peak.)	240	60	60

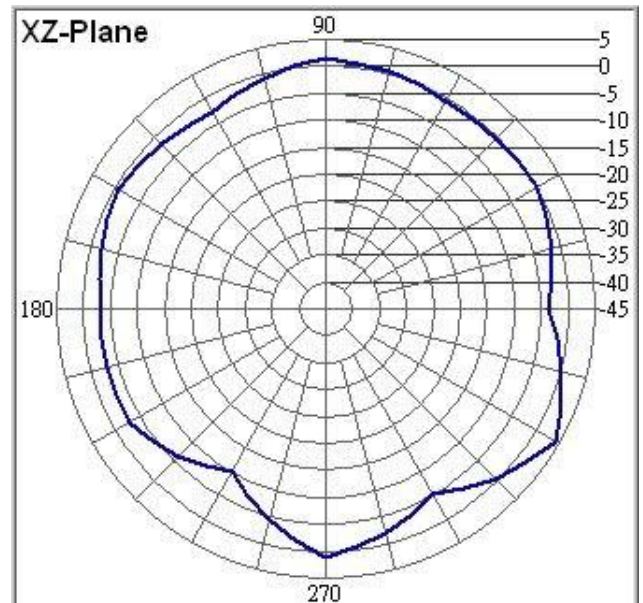
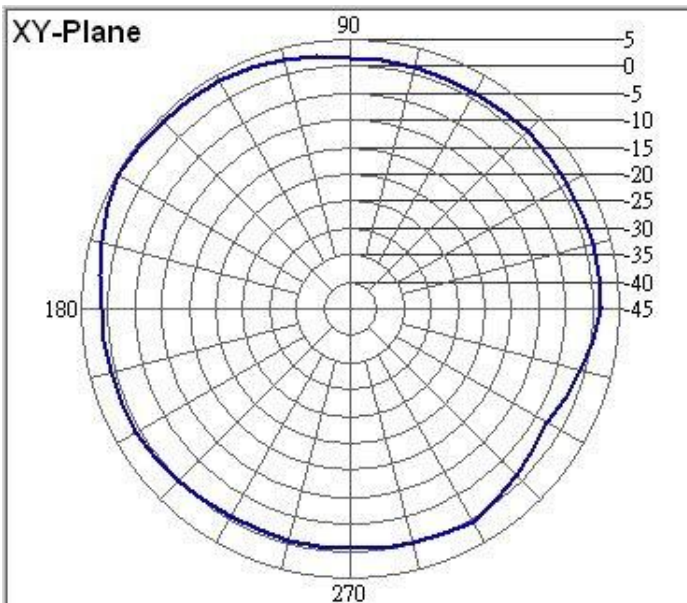
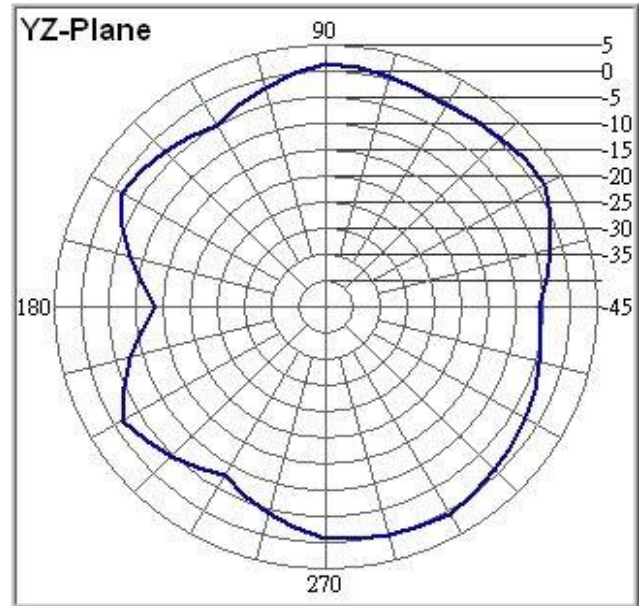
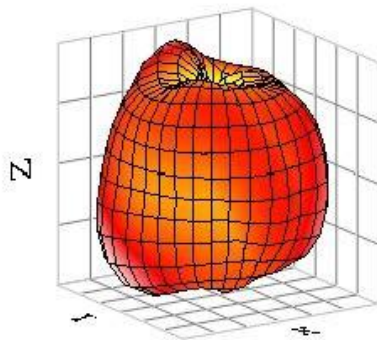
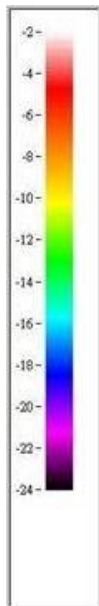


High performance product for you

➤ Gain (dBi)

Frequency = 5800 MHz

dBm	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	4.597415	4.137565	1.599898
V-Pol. (Peak.)	-4.172994	-3.075796	-6.707426
H+V. (Peak.)	4.716626	4.3295	1.726938
H-Pol. (Avg.)	1.177323	-1.259963	-2.081868
V-Pol. (Avg.)	-9.54566	-8.657941	-10.400245
H+V. (Avg.)	1.530277	-0.533587	-1.48515
Angle	XY-Plane	XZ-Plane	YZ-Plane
H-Pol. (Peak.)	150	330	30
V-Pol. (Peak.)	120	150	90
H+V. (Peak.)	150	330	30



High performance product for you

➤ Efficiency (%)

Total/ Frequency	Ant. Port	Tot.Rad. Pwr. (dBm)	Peak EIRP (dBm)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain(dBi)
2400	0	-0.551292	2.953834	3.505127	-0.551292	88.078679	2.953834
2437	0	-0.417783	2.47196	2.889744	-0.417783	90.828397	2.47196
2442	0	-0.569781	2.30174	2.871521	-0.569781	87.704499	2.30174
2450	0	-0.651024	2.379037	3.030061	-0.651024	86.079078	2.379037
2484	0	-0.809978	2.326679	3.136657	-0.809978	82.985493	2.326679
2500	0	-0.763333	3.006369	3.769702	-0.763333	83.881597	3.006369
5150	0	-1.769298	3.596862	5.36616	-1.769298	66.538074	3.596862
5250	0	-0.420633	4.954602	5.375236	-0.420633	90.768819	4.954602
5260	0	-0.038325	5.863335	5.90166	-0.038325	99.121418	5.863335
5350	0	-1.005398	5.479673	6.485071	-1.005398	79.334154	5.479673
5440	0	-0.627549	5.106631	5.73418	-0.627549	86.545614	5.106631
5470	0	-0.826488	4.953849	5.780337	-0.826488	82.670628	4.953849
5530	0	0.128241	5.460569	5.332329	0.128241	102.996883	5.460569
5620	0	-0.490127	5.047398	5.537524	-0.490127	89.327945	5.047398
5710	0	-1.29739	4.350057	5.647447	-1.29739	74.175586	4.350057
5725	0	-1.596735	3.540759	5.137495	-1.596735	69.235121	3.540759
5800	0	0.126234	5.04431	4.918076	0.126234	102.949298	5.04431
5875	0	-0.545577	3.866189	4.411766	-0.545577	88.194661	3.866189
5890	0	-1.236825	4.060992	5.297817	-1.236825	75.217263	4.060992

6. Dimension

