

Antenna

YCGO007AA Datasheet

Antenna Services

Version: 1.0

Date: 2021-06-04

Status: Released



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About the Document

Revision History

Version	Date	Author	Note
-	2021-06-04	Kenny YIN/ Aria CHU	Creation of the document
1.0	2021-06-04	Kenny YIN/ Aria CHU	First official release

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1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

2 Product Features

- Ceramic GPS
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	1560–1601 MHz
Input Impedance	50 Ω
VSWR	≤ 3
Gain	≤ 2.0 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	25 mm \times 25 mm \times 6.3 mm
Casing	Ceramic
Connector Type	IPEX MHF I
Working Temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C
Radome Color	-

4 Overall Performance

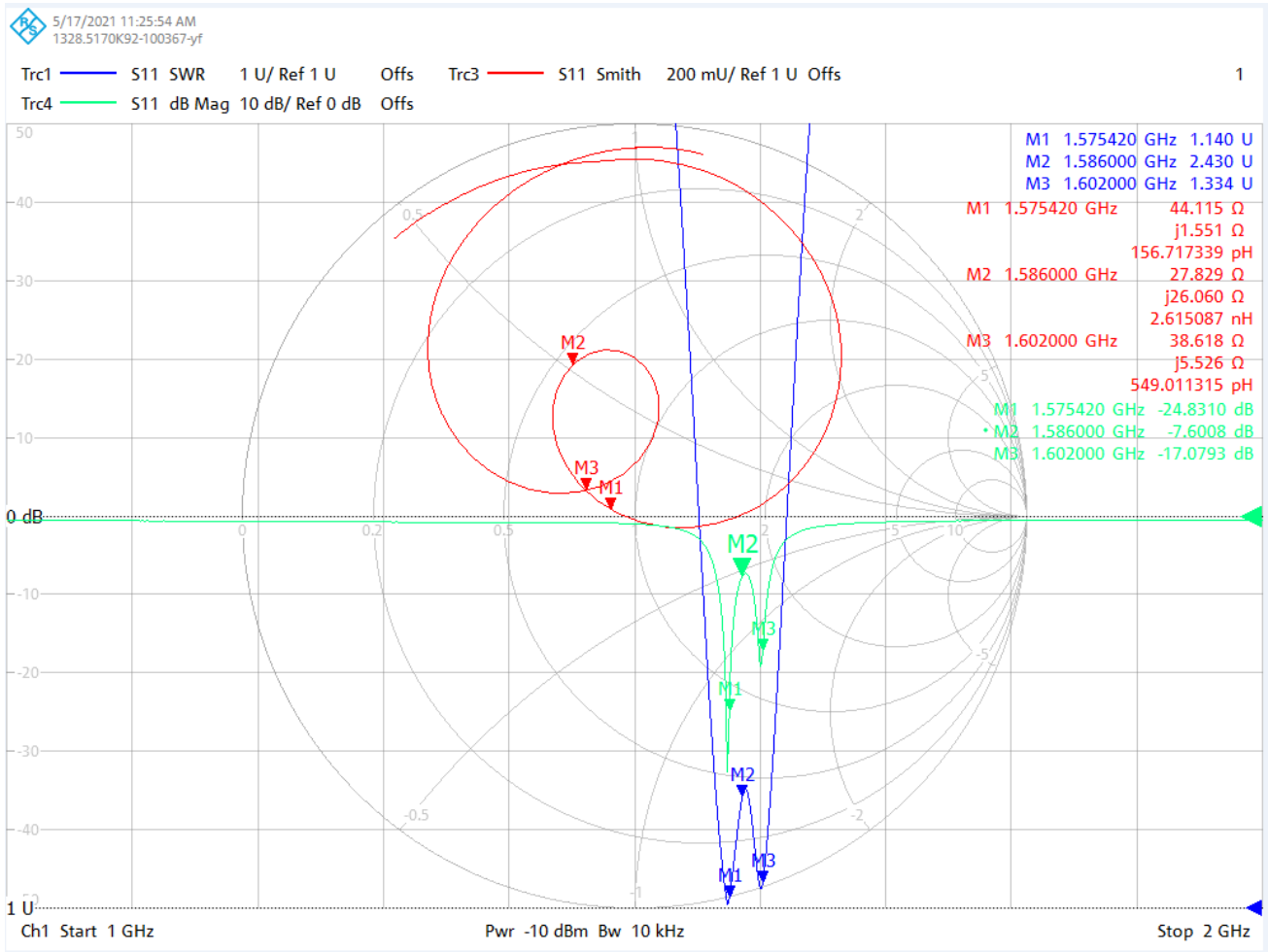
4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 8.0 GHz



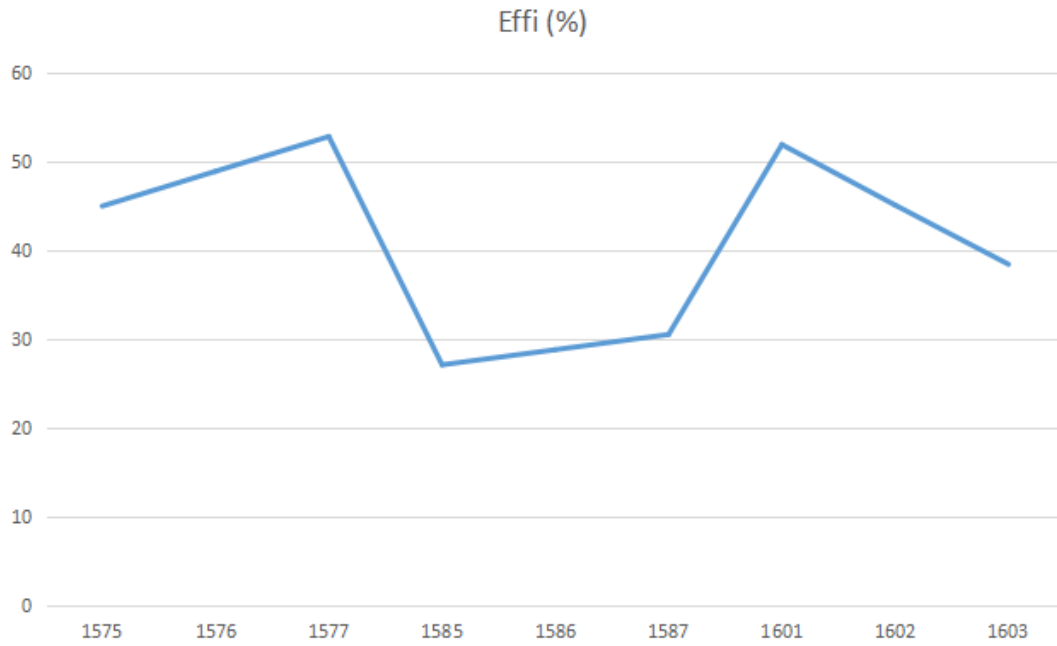
4.2. VSWR

- Note: 25 mm x 25 mm ground plane for grounding test and debugging.



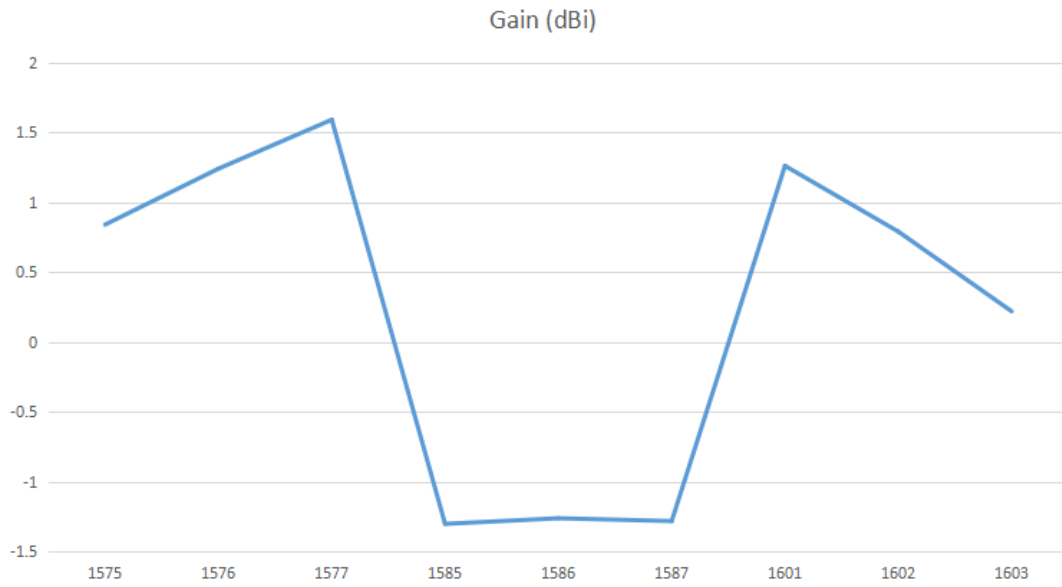
Frequency (MHz)	1575.42	1586	1602
VSWR	1.14	2.43	1.33

4.3. Efficiency



Frequency (MHz)	1575	1586	1602
Efficiency (%)	44.96	28.77	45.07

4.4. Gain



Frequency (MHz)	1575	1586	1602
Gain (dBi)	0.84	-1.26	0.79

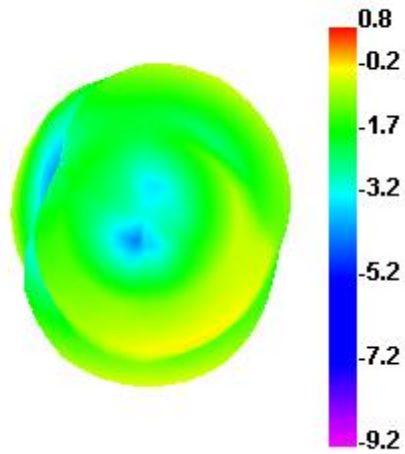
4.5. Radiation Pattern



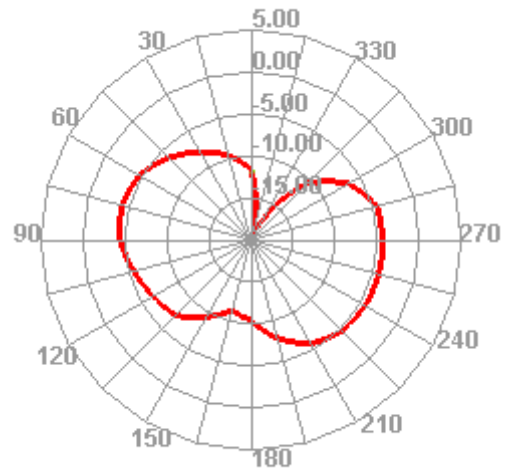
H plane: the tangent of XY
E1 plane: the tangent of XZ
E2 plane: the tangent of YZ

4.5.1. 1575 MHz

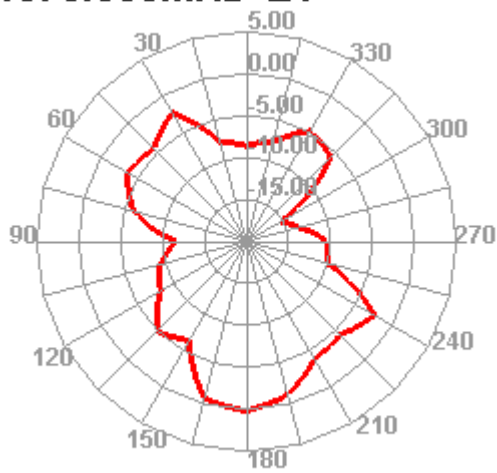
1575.000MHz



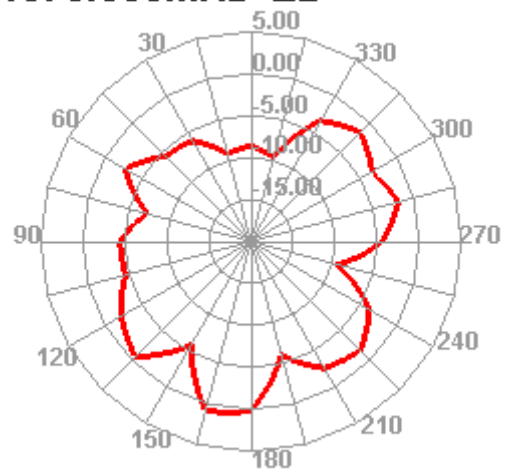
1575.000MHz H



1575.000MHz E1

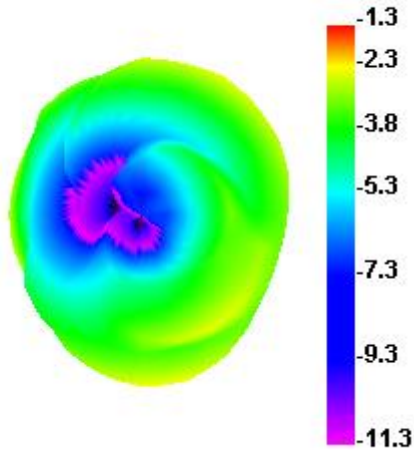


1575.000MHz E2

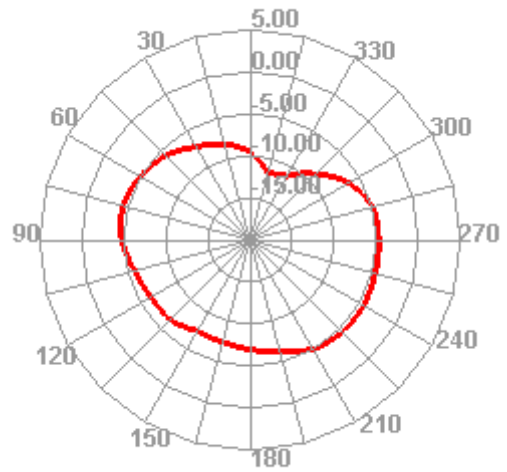


4.5.2. 1586 MHz

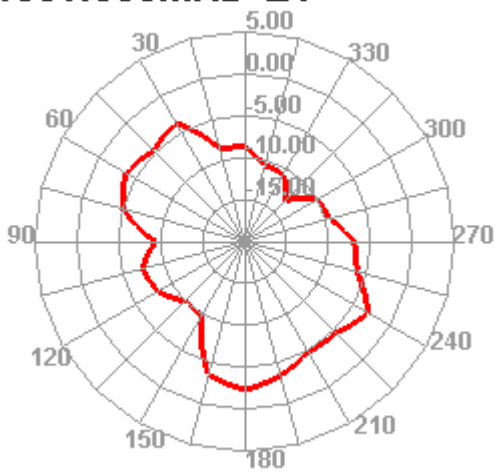
1586.000MHz



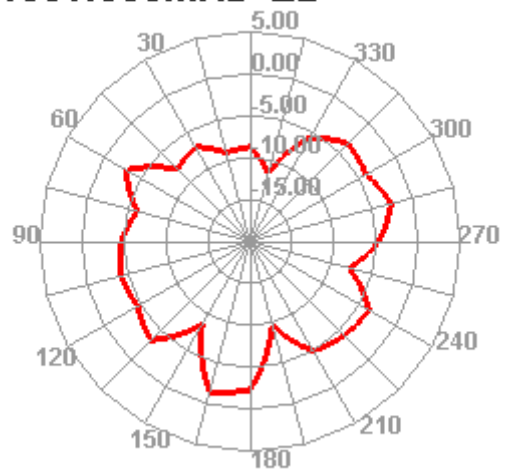
1586.000MHz H



1586.000MHz E1

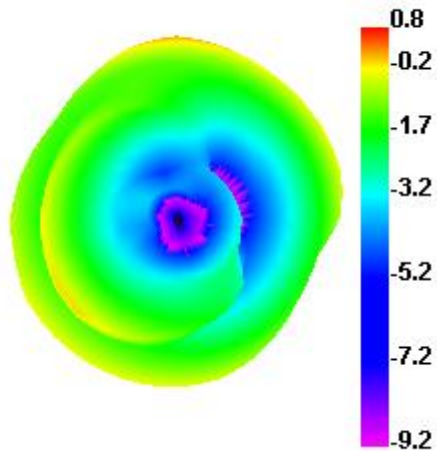


1586.000MHz E2

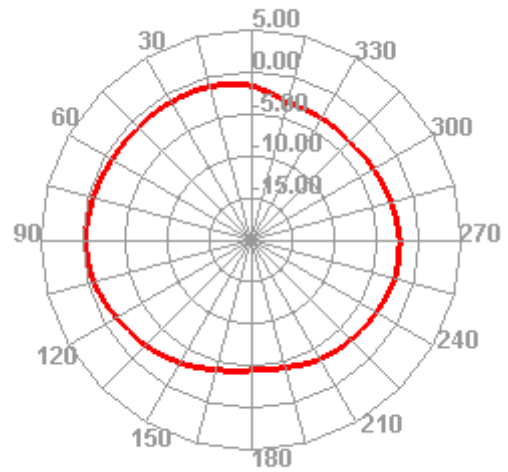


4.5.3. 1602 MHz

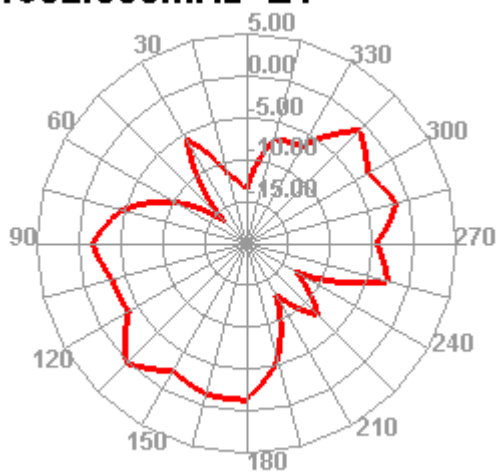
1602.000MHz



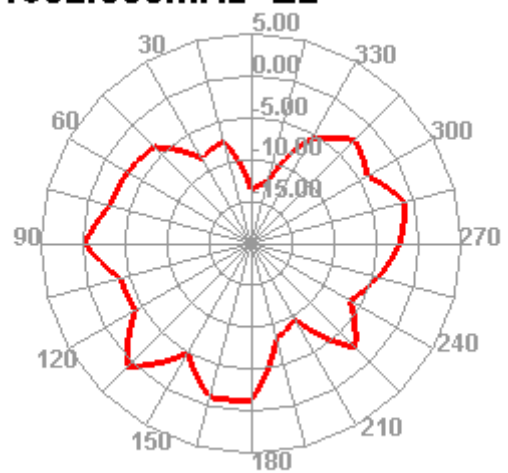
1602.000MHz H



1602.000MHz E1



1602.000MHz E2



5 Product Size

