



Antenna Specification

Manufacture: Hongxin IoT

Product Name: IGAZE PLUS

Product Code: HX-AP915-488-D5

Antenna Type: Internal Antenna

Test Date: 2023.08.28

Tested by: Long Wang

Approved by: Licco



Contents

1	General Description.....	1
2	Design Specifications.....	1
3	Test Configurations	2
3.1	Test Environment.....	2
3.2	Test Equipment.....	2
3.3	Test Principle	2
4	Test Results.....	3
4.1	Gain and Frequency	3
4.2	Radiation Pattern	3
5	Antenna Dimensions and Interface.....	4
5.1	Antenna Photo and Dimensions.....	4
6	Test Setup Photo	5



1 General Description

Manufacturer	Shenzhen Hongxin IoT Technical Electronics, Ltd.
Address	2nd Floor, Building C10, Xin'an Second Industrial Zone, Gushu 2nd Road, Xixiang, Bao'an District, Shenzhen
Test Location	Room 106, Building 3, Letong Science Park, No. 500, Qiuyi Road, Binjiang District, Hangzhou
Product Name	IGAZE PLUS
Product Code	HX-AP915-488-D5
Antenna Type	Internal Antenna
Test Items	Gain, Frequency, VSWR Chart
Test Frequency	800MHz ~ 930MHz
Test Standard	ANSI/IEEE Std 149-1979

2 Design Specifications

Design Specifications	Typical	Units
Antenna Form	Internal Antenna	
Working Frequency	850 ~ 930	MHz
Gain	2.5	dBi
Antenna efficiency	35-80	%
VSWR	<1.8	
Polarization	Vertical Polarization	
Axial Ratio	When the antenna is circularly polarized, the axial ratio in the working broadband is noted	
Radiation pattern	Omini	
Impedance	50	Ohm
Power handling	33	dBm
Interface	SMA Internal Hole	
Overall dimensions	48	mm
Weight	N/A	
Operating Temperature	-30-70	°C
Storing Temperature	-30-70	°C



3 Test Configurations

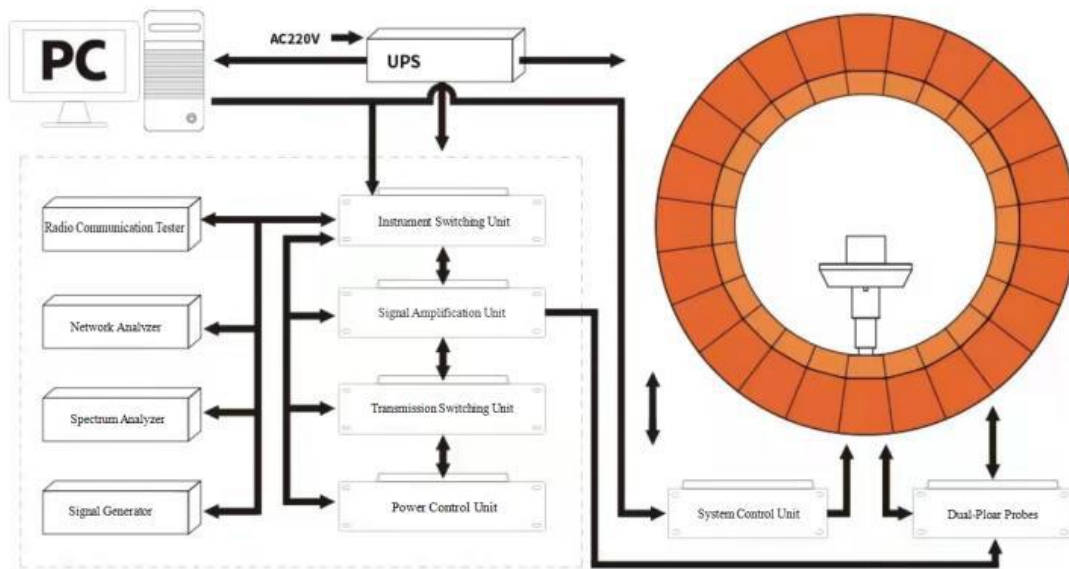
3.1 Test Environment

Temperature (°C)	25
Humidity (%RH)	60
Atmospheric Pressure (hPa)	1005

3.2 Test Equipment

Test System	TEM 24 Multi-probe Microwave Chamber
Test Instrument	Agilent E5071B , Agilent N9938A

3.3 Test Principle



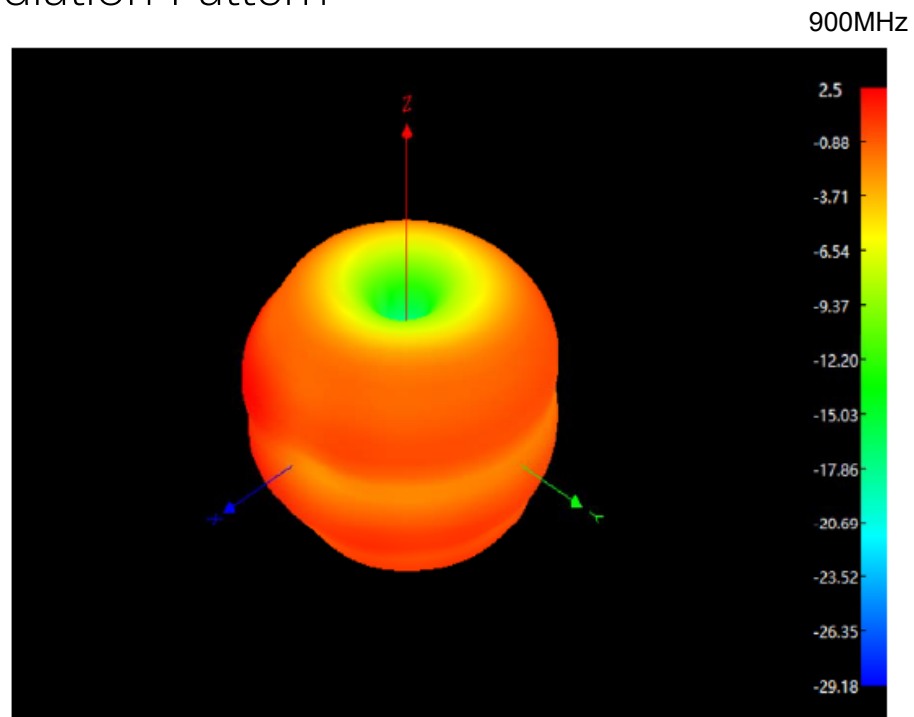


4 Test Results

4.1 Gain and Frequency

Passive Test For 850-950MHz			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
850	58.8	-2.3	2.1
860	61.7	-2.1	2.2
870	64.9	-1.9	2.2
880	64.4	-1.9	2.2
890	67.5	-1.7	2.5
900	70.5	-1.5	2.5
910	75.5	-1.2	2.4
920	78.7	-1.0	2.3
930	77.5	-1.1	2.4
940	74.3	-1.3	2.3
950	74.5	-1.3	2.3

4.2 Radiation Pattern

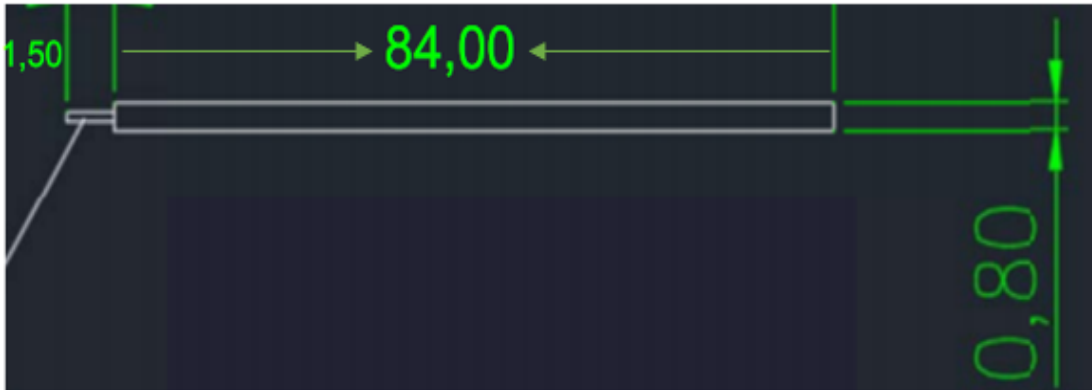




5 Antenna Dimensions and Interface

5.1 Antenna Photo and Dimensions

Antenna Photo & Length (mm)





6 Test Setup Photo

