

Antenna

YEGT001BA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2022-06-24	Ezail TAN/ Jason LONG	Creation of the document
1.0	2022-06-24	Ezail TAN/ Jason LONG	First official release
1.1	2022-09-27	Ezail TAN/ Jason LONG	1. Updated working temperature. (Chapter 3) 2. Updated test environment picture. (Chapter 4)

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1 Product Description

This Quectel GNSS antenna adopts a diversity of forms to guarantee the most suitable polarization type. Quectel's positioning products support single-band or multi-band operation modes to meet various high-precision positioning requirements of customers' products. Quectel provides both passive and active antennas to satisfy the customer demand for high gain. Such antenna supports different installation or connection methods such as pin mount, surface mount, magnetic mount, internal cable, and external SMA. Customized connector type and cable length are provided according to requirements.

2 Product Features

- GNSS
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	1561 ±5 MHz; 1575 ±5 MHz; 1602 ±5 MHz
Input Impedence	50 Ω
VSWR	≤ 2.15
Gain	≤ 0.7 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size (mm)	50 × 16.4
Casing	TPEE
Connector Type	SMA (Male pin with internal thread)
Working Temperature	-40 °C to +85 °C
Radome Color	Black
Mounting Type	Screw
IP Rating	IP55
Weight	Typ: 6 g

4 Overall Performance

4.1. Test Environment

- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz

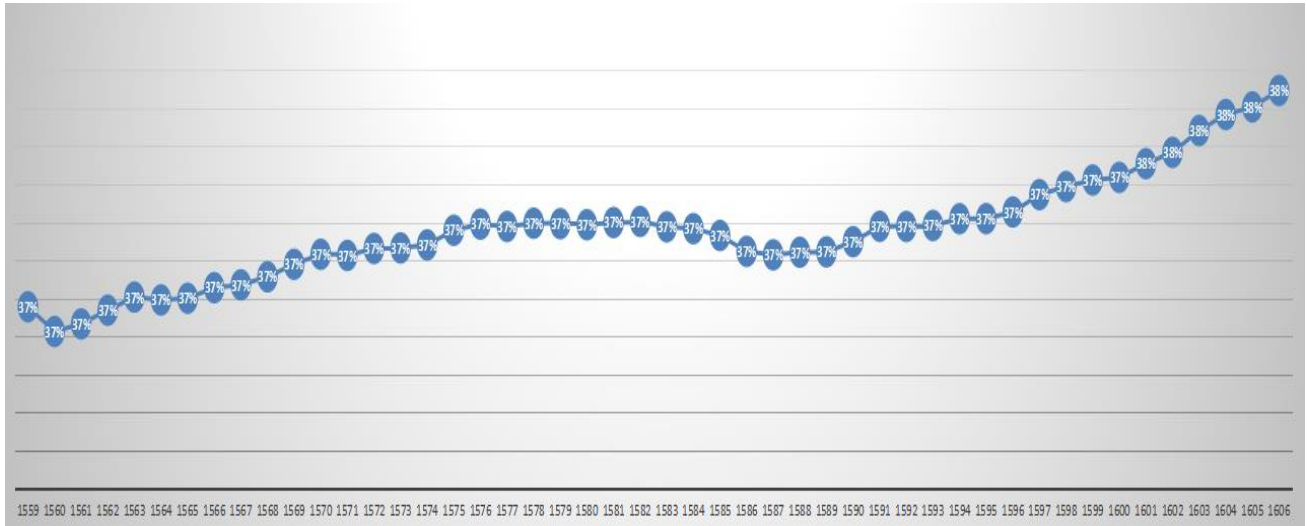


4.2. VSWR



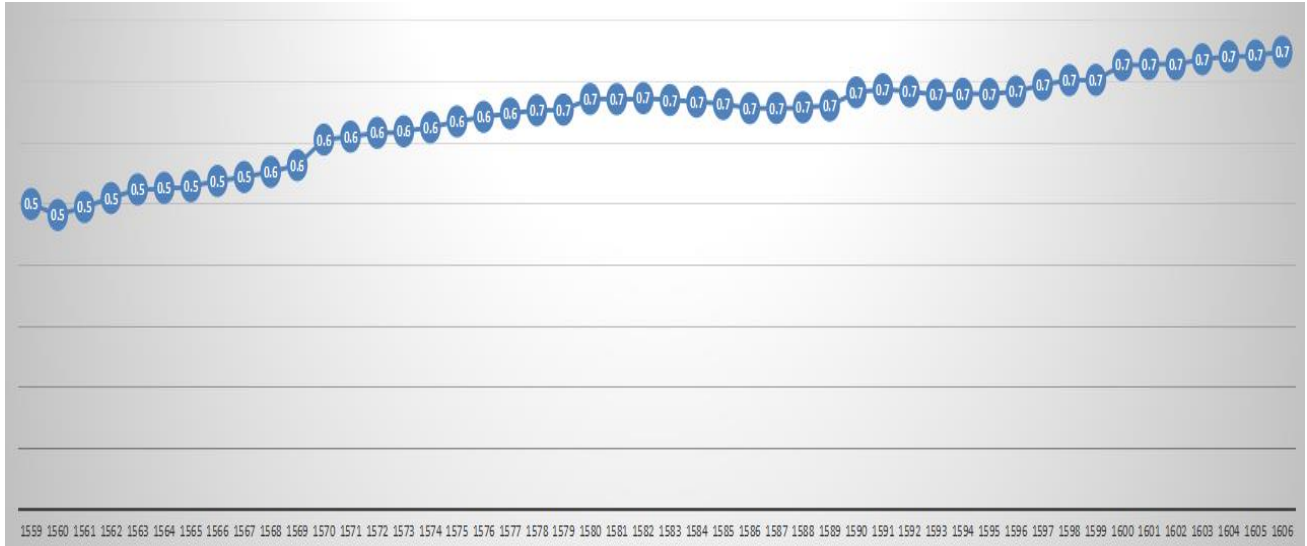
Frequency (MHz)	1561	1575	1602
VSWR	2.04	2.15	2.13

4.3. Efficiency



Frequency (MHz)	1561	1575	1602
Efficiency (%)	37	37	38

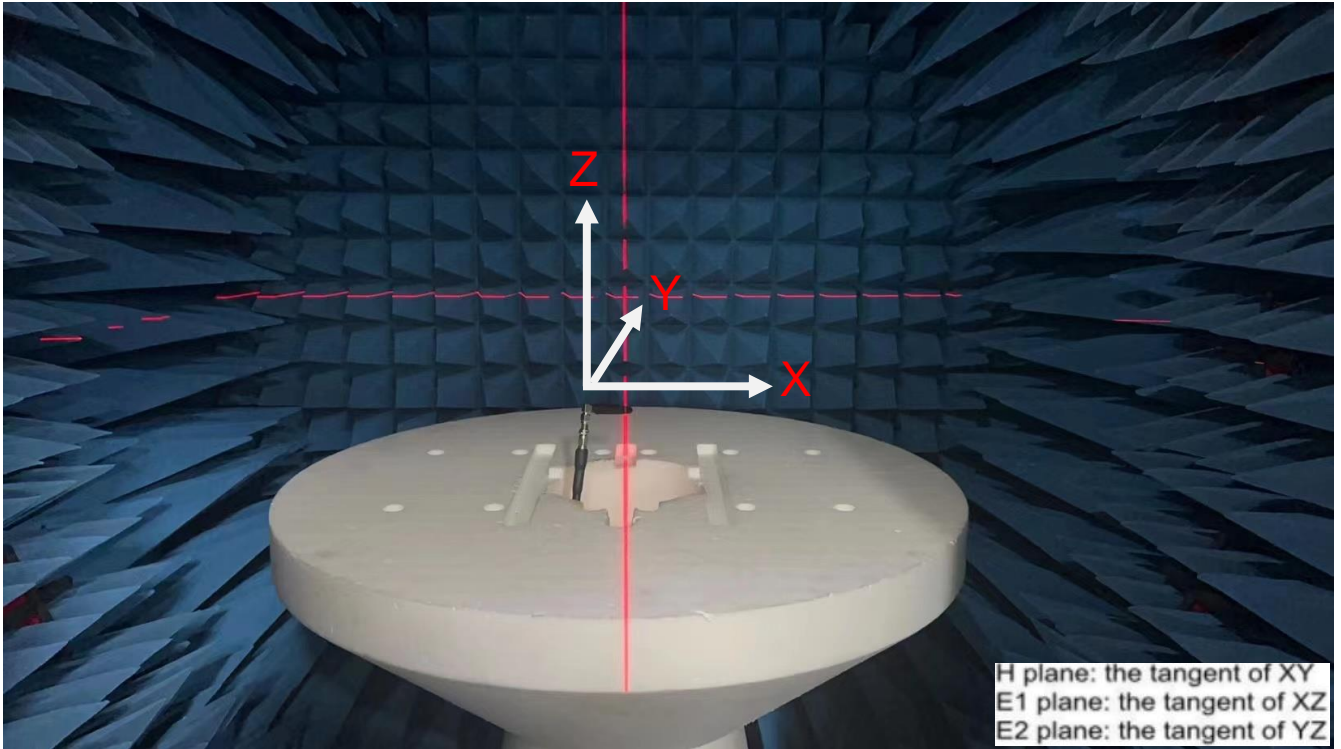
4.4. Gain



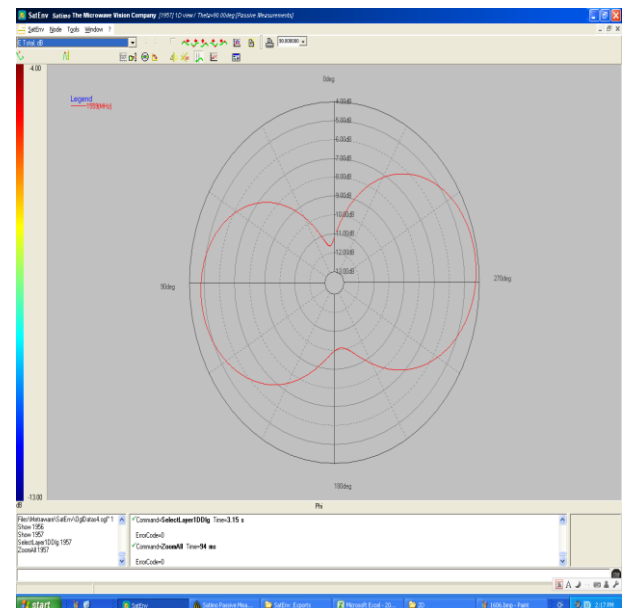
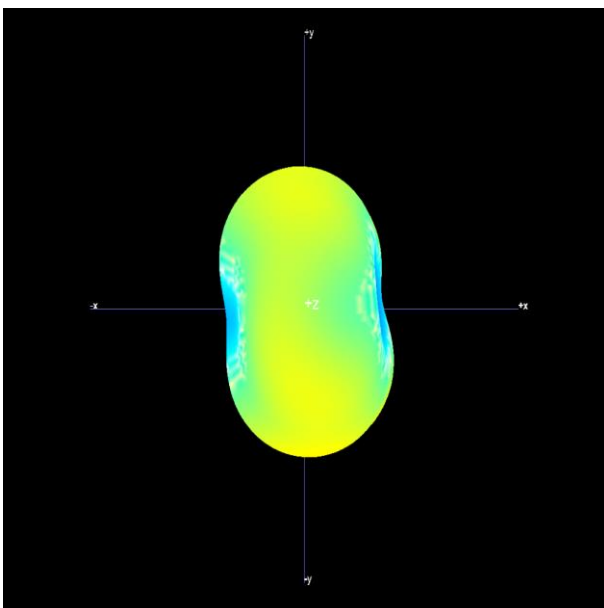
Frequency (MHz)	1561	1575	1602
Gain (dBi)	0.5	0.6	0.7

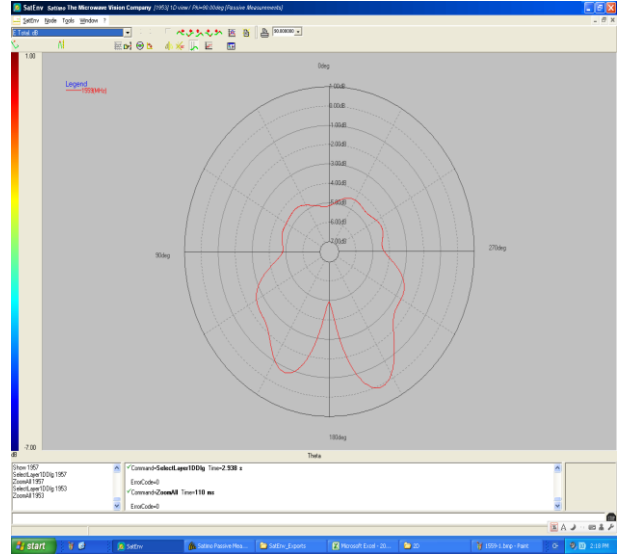
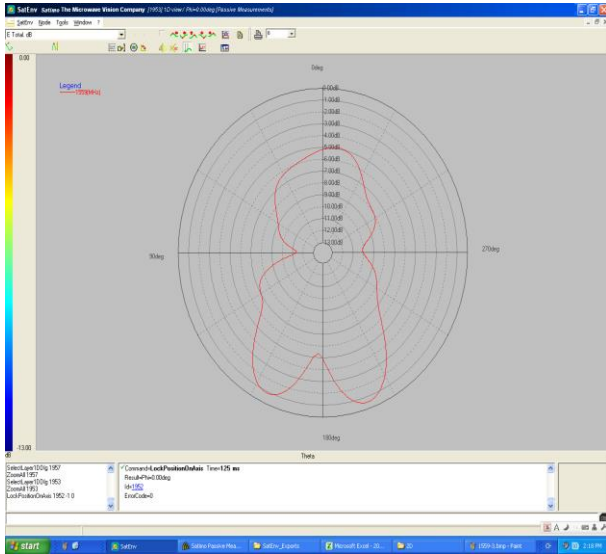
4.5. Radiation Pattern

- Test condition: free space

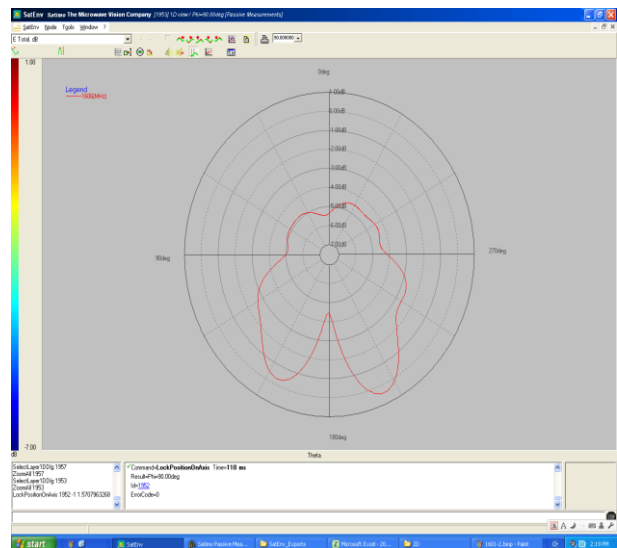
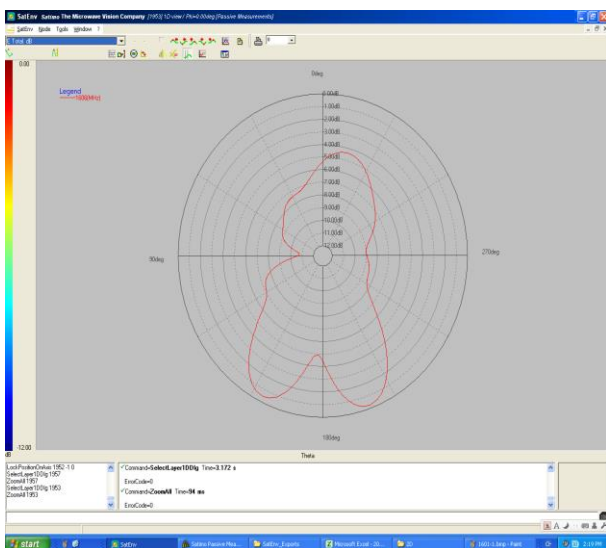
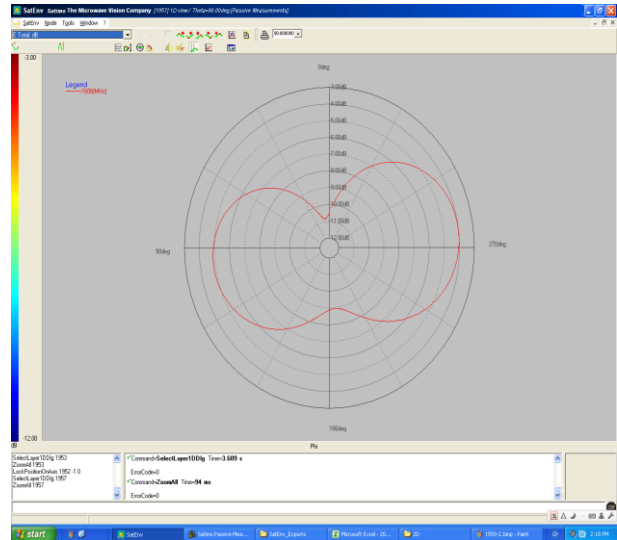
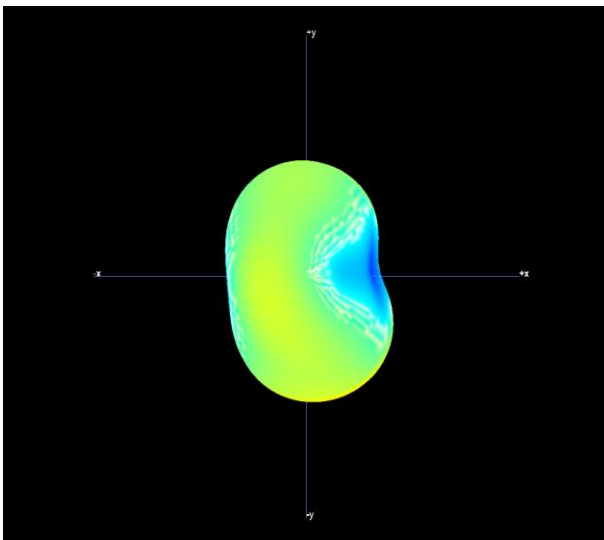


1559 MHz



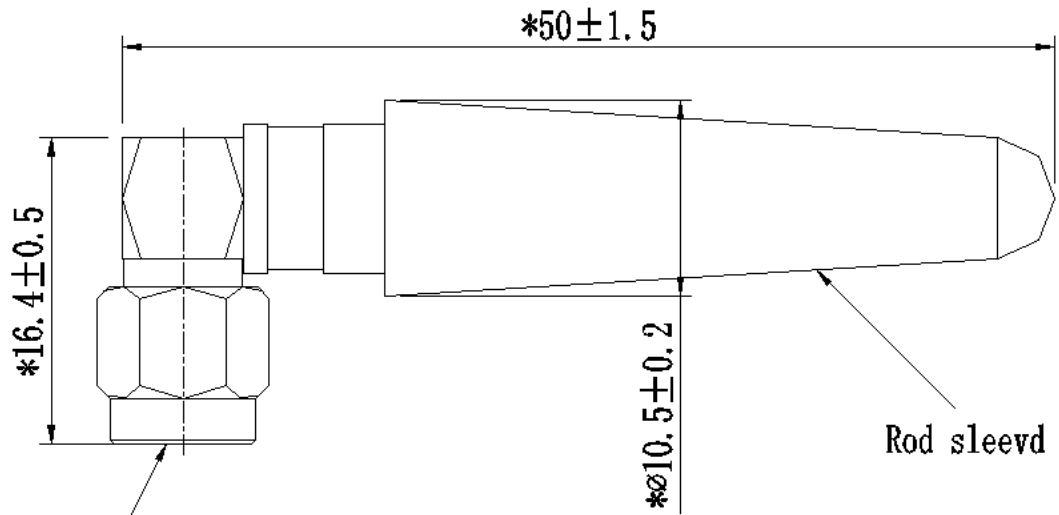


1606 MHz



5 Product Size

ROHS



SMA/Au-PLATED (Male pin with internal thread)
Salt spray requirements: $\geq 48h$

