

G-2RK3

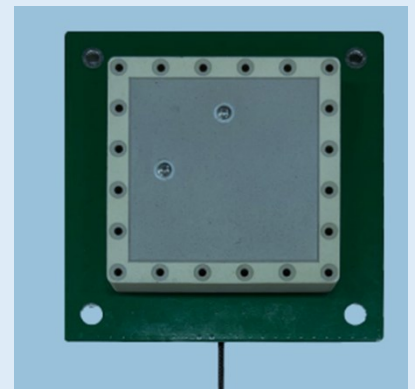
High performance GNSS/Iridium/NTN Antenna

GNSS

Iridium

NTN

The GNSS/Iridium/NTN Ceramic Antenna G-2RK3 is designed to meet high standards for global navigational connectivity without compromising efficiency. Compact in size, the G-2RK3 offers superior performance compared to competitors. It is the ideal solution for tracking and mapping devices; industrial machinery; sea vessels; air and automobile navigation; and any compatible device that requires constant global connectivity with precise guidance.



Key Features

- Support GNSS/Iridium/NTN
- High Reliability/Sensitivity
- Easy to install
- RoHS Compliant

Document Information

Product	Antenna
Part Number	G-2RK3
Version	1.0 (current)
Date	2025-07-15
Status	Released

Revision History

Version	Date	Author	Modifications
1.0	2025-07-15	Arthur Young	Initial Release

Specifications

Antenna Specifications	
Frequency	GNSS L1:1559-1606MHz Iridium:1616-1626.5MHz NTN n255: TX: 1626.5-1660.5MHz RX:1525-1559MHz
VSWR	2.0 Max@ NTN n255 1.1 Max@1575-1602MHz 2.0 Max@ 1616-1626.5MHz
Gain	5.0dBi@ NTN n255 5.2dBi@1575-1602MHz 5.4dBi@1616-1626.5MHz
Impedance (Ω)	50
Radiation	Directional
Polarization	RHCP
Connector	RF1
Cable Type	RG137
Cable Length	116mm
Operating Temperature	-40 °C to + 85 °C
Storage Temp / Humidity	25±5°C / <70%
Compliance	RoHS

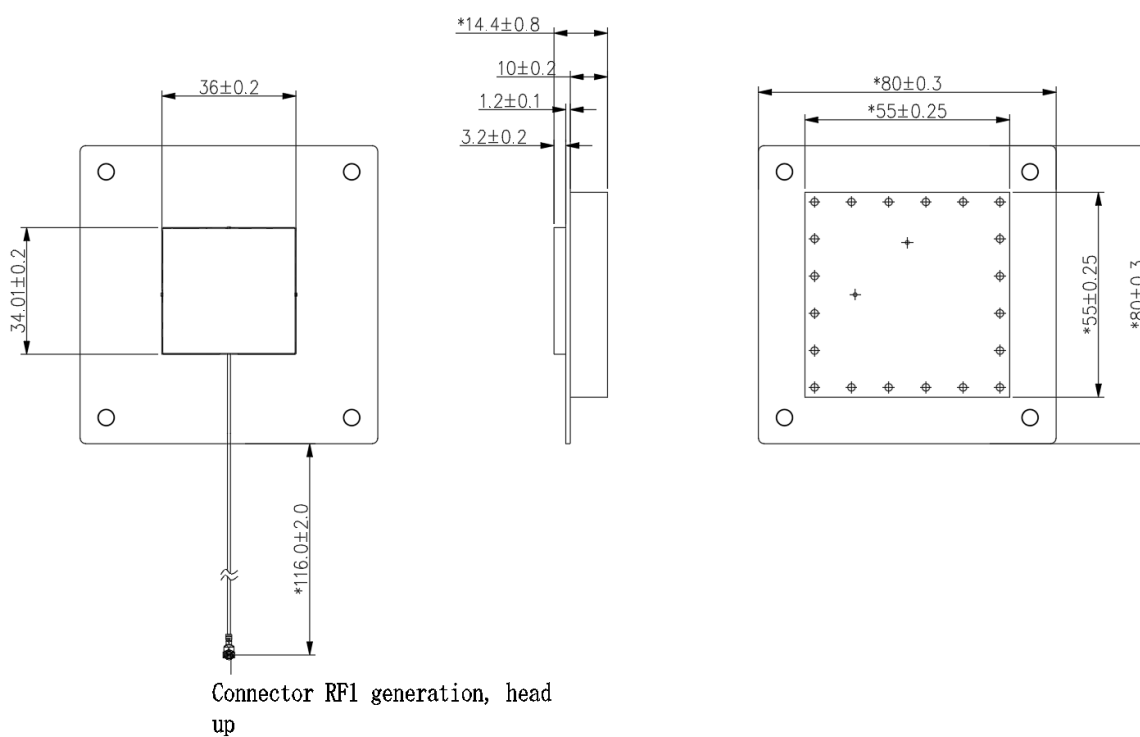
Caution:

1. Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components, as this will cause damage to the component.
2. Do not expose the component to an open flame.
3. This specification applies to the functionality of the component as a single unit. Please ensure the component is thoroughly evaluated in the application circuit.

Application

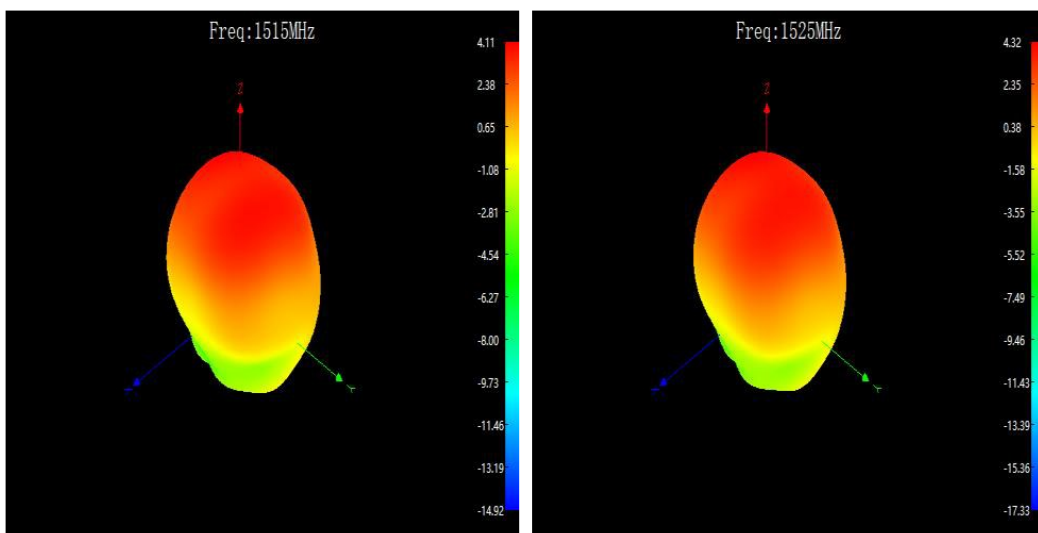
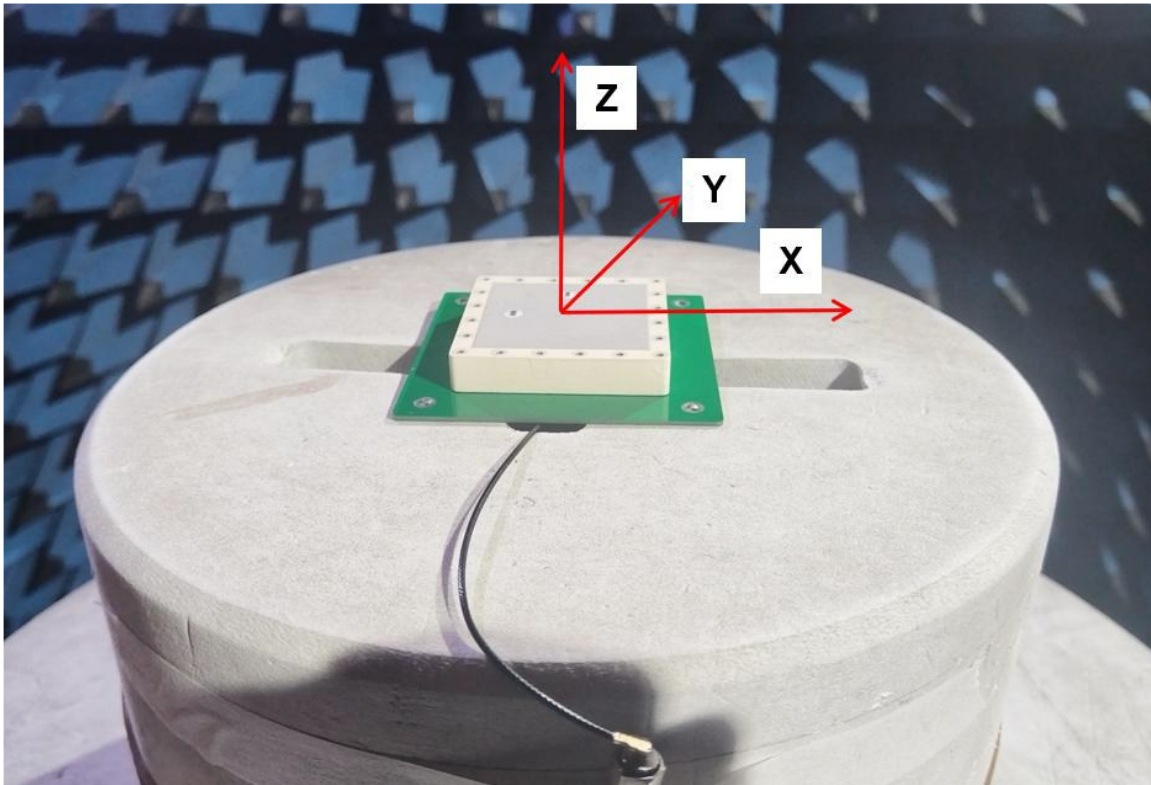
- Marine communication Gateways
- Set-Top Boxes
- Security
- Smart Monitoring

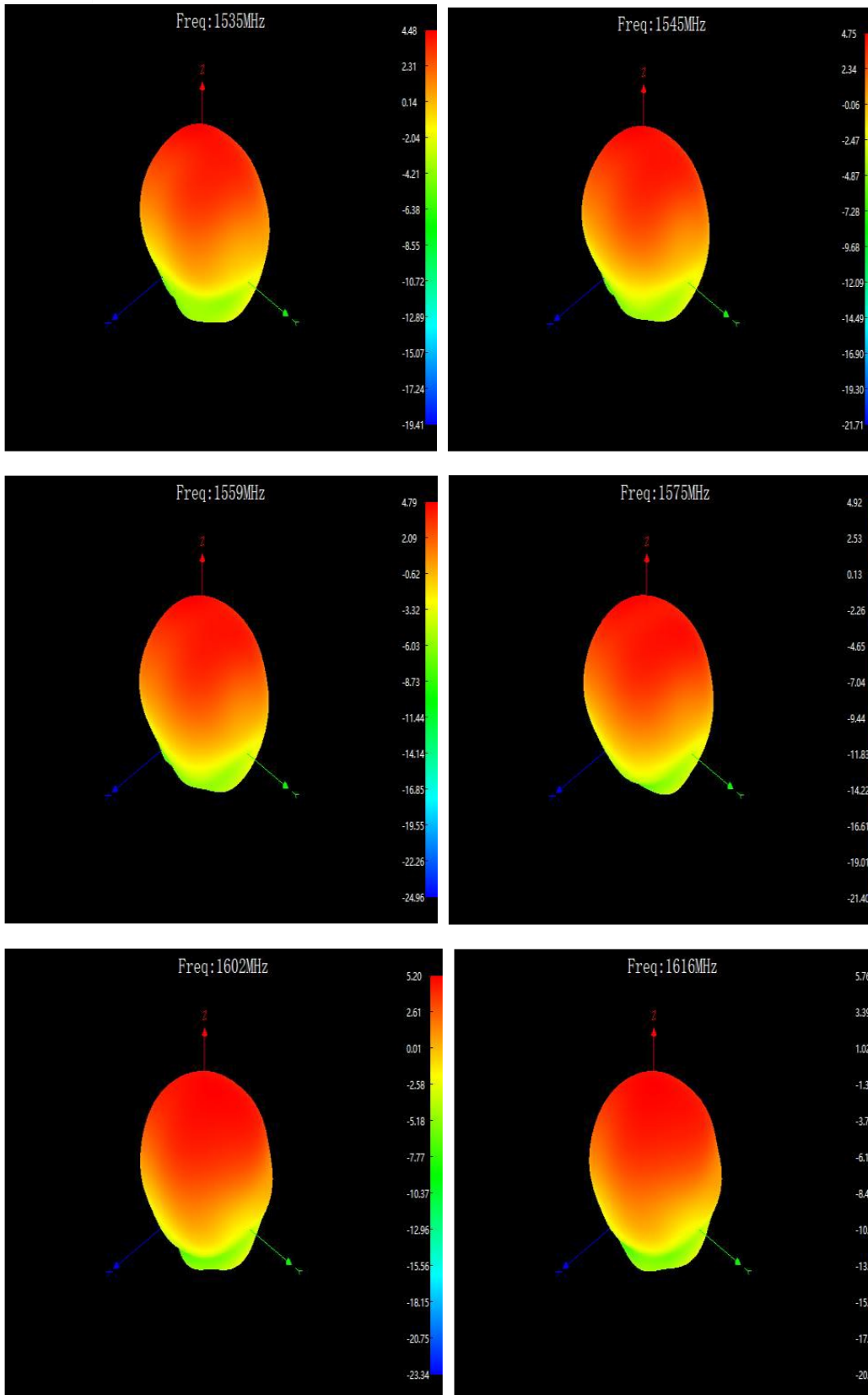
Product Images and Dimensions

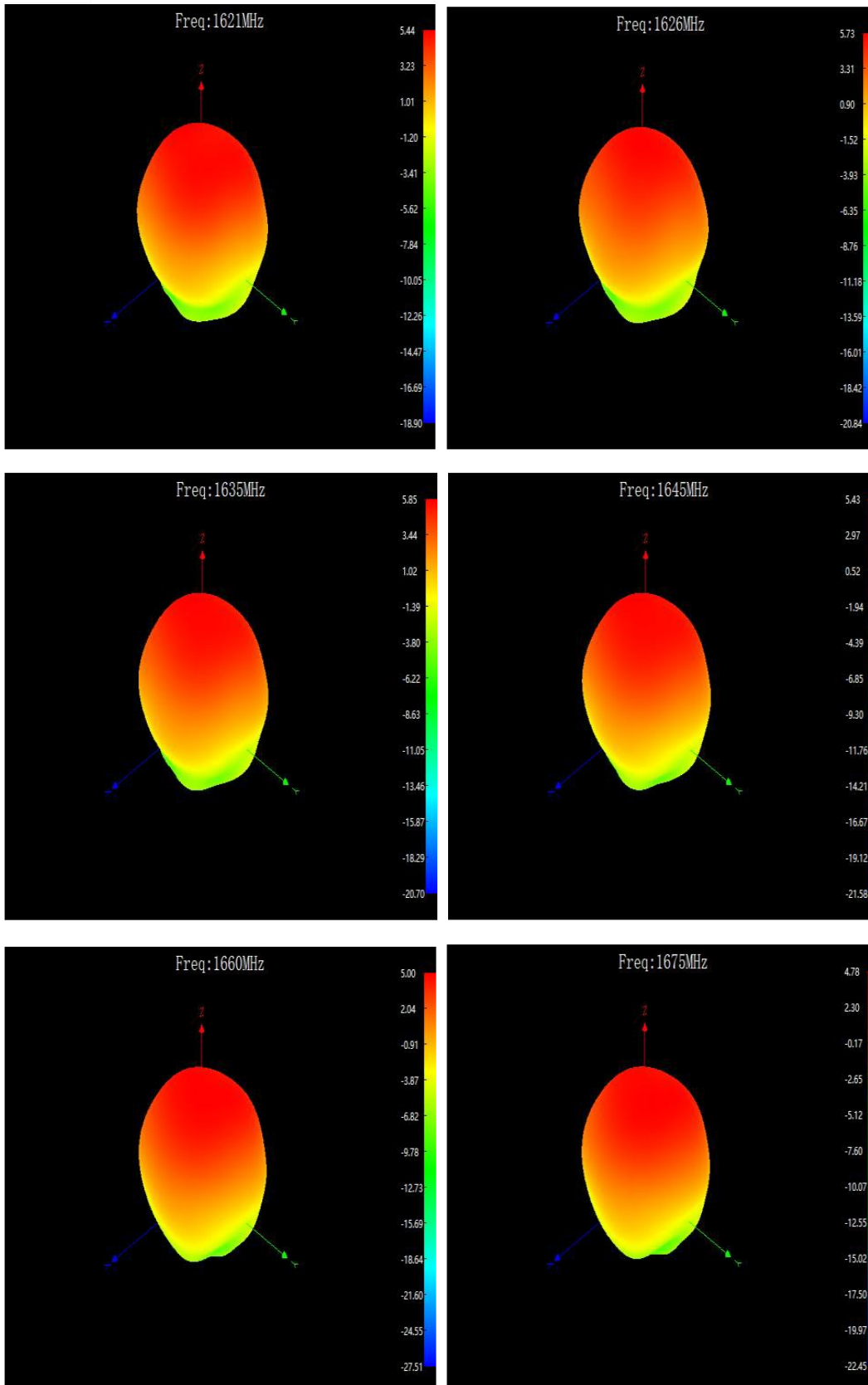


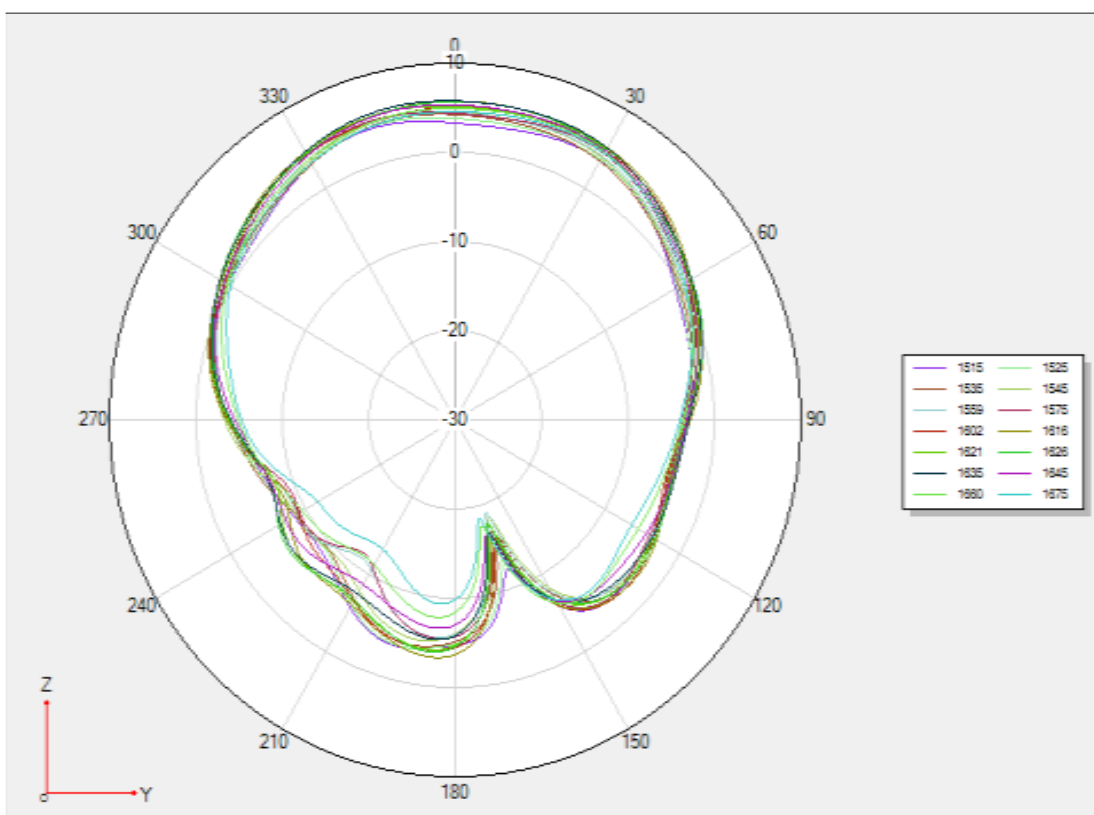
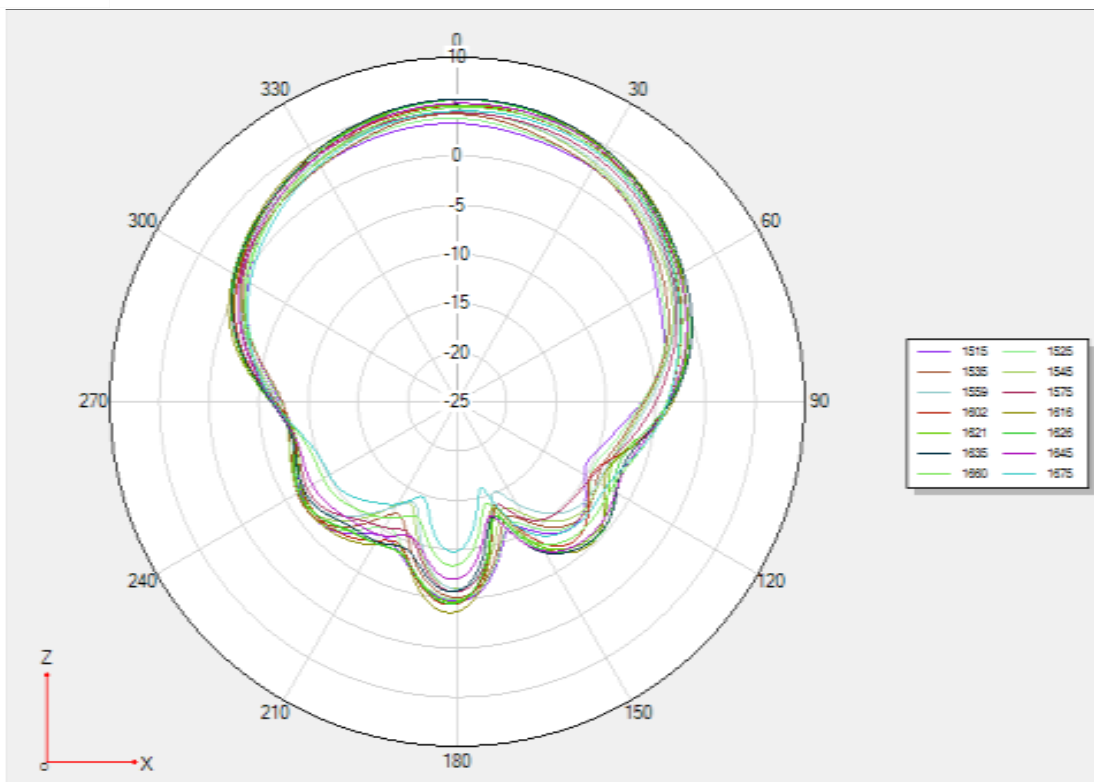
Serial Number	Materials	Specification	Quantity
1	PCB	FR4, Double-sided panel	1
2	Shield cover	Aluminum bronze	1
3	Terminal wire	$\phi 1.37$, Exposure length 116mm, Black	1
4	NTN255/GNSS ANT	PPO, NTN255/GNSS Frequency band	1

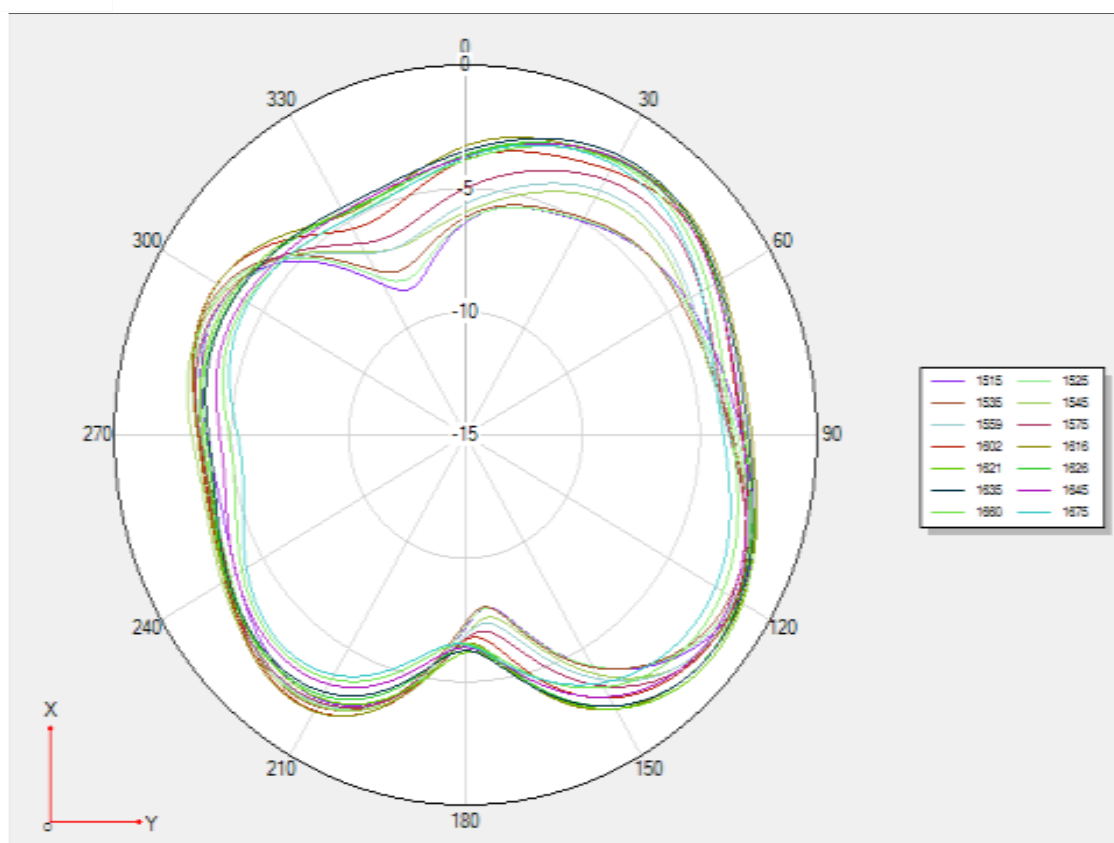
Radiation Pattern



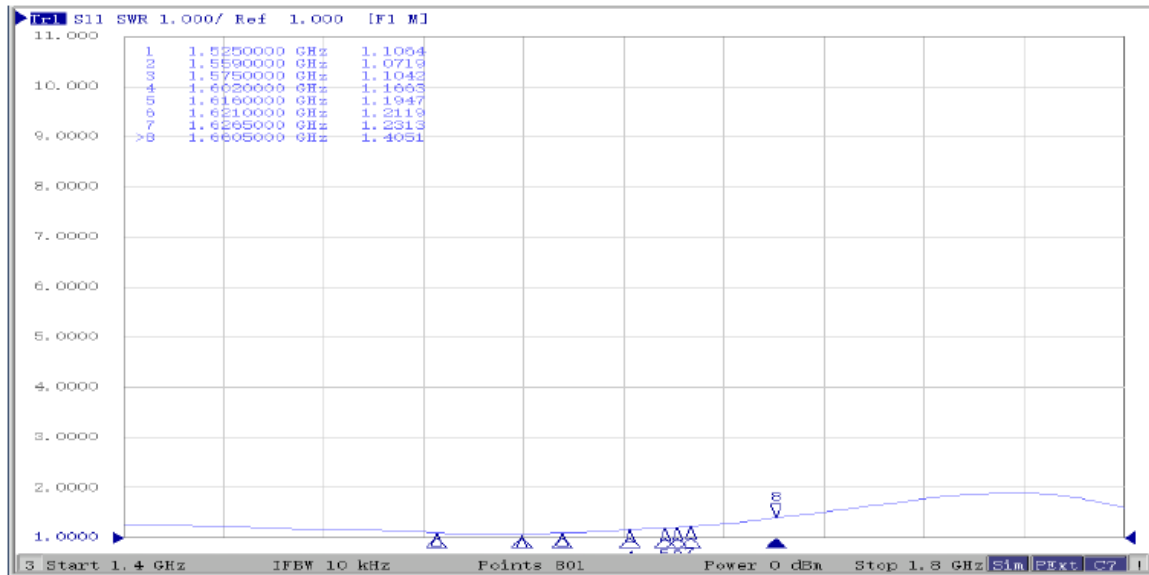








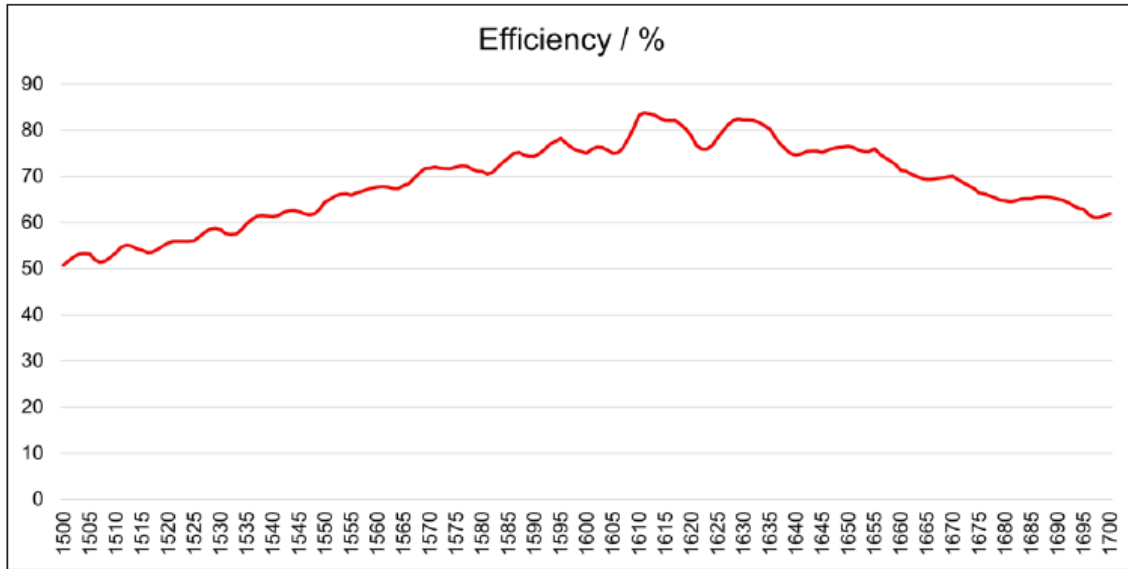
Antenna Smith and VSWR



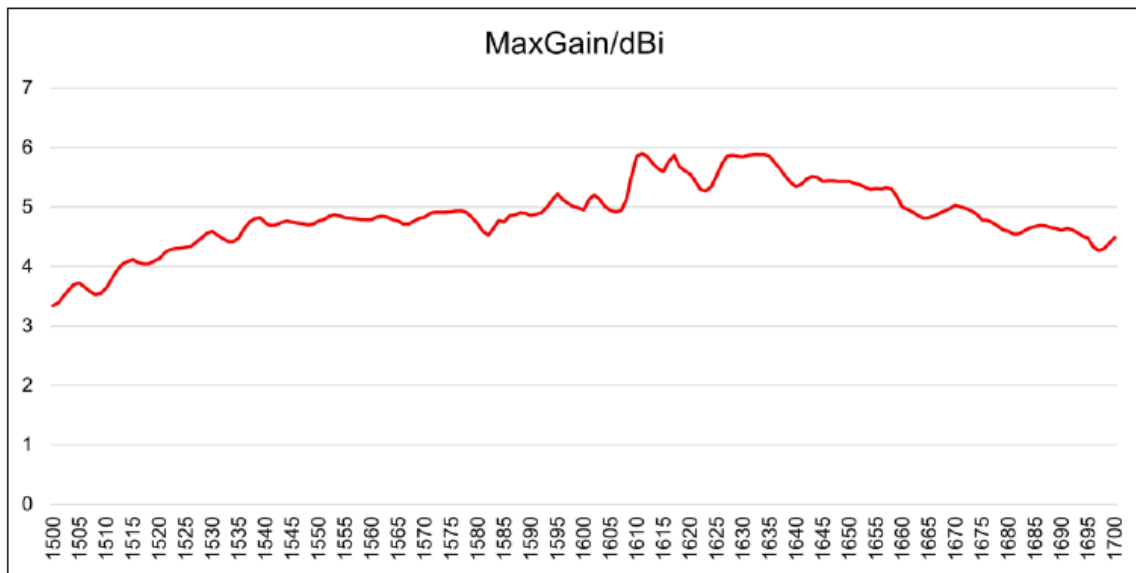
Frequency (MHz)	1525	1559	1575	1602	1616	1621	1626.5	1660.5
VSWR	1.1	1.07	1.1	1.16	1.19	1.21	1.23	1.4



Frequency (MHz)	1525	1559	1575	1602	1616	1621	1626.5	1660.5
Return Loss (dB)	-25.93	-29.18	-26.1	-22.29	-21.03	-20.37	-19.68	-15.47



Frequency (MHz)	1525	1559	1575	1602	1616	1621	1626.5	1660.5
Efficiency (%)	56.1	67.45	71.94	76.38	82.04	76.74	79.8	71.29



Frequency (MHz)	1525	1559	1575	1602	1616	1621	1626.5	1660.5
Peak Gain (dBic)	4.32	4.79	4.92	5.2	5.76	5.44	5.73	5.0

Order Information

Part Number	Description
G-2RK3	High performance GNSS/Iridium/NTN Antenna

About Us

MIOT Wireless Solutions Co., Ltd., established in 2017, is composed of seasoned IoT industry experts and developers from all over the world.

We possess extensive knowledge in **Antennas, Device Prototyping, ODM, Component Sourcing, and Manufacturing**, with a specialized focus on IoT products.

Regardless of the type of connectivity you require in your design, our wireless experts can assist you in achieving it. MIOT's products and solutions have already connected hundreds of thousands of devices in the field.

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