

3dBi 860-930MHz Fiberglass Antenna

Datasheet

1 Feature

- **Designed to withstand harsh weather conditions:** The outer shell is made of fiberglass material and features IP67 waterproof capability, providing complete dust resistance and the ability to withstand immersion in 1m of water for 30 minutes, ensuring reliable performance in outdoor environments.
- **Resistant to high and low temperatures:** Whether in scorching summers or freezing winters, it operates stably. The operating temperature range is typically between -40°C and +85°C, adapting to various extreme climates.
- **Anti-corrosion and anti-aging:** The fiberglass material is naturally resistant to corrosion and UV radiation, ensuring no cracking, deformation, or rusting during long-term outdoor use, with a service life of up to ten years.
- **360° omnidirectional coverage:** It provides horizontal 360° and a certain vertical angle of omnidirectional signal coverage, ensuring a stable connection regardless of the device's direction, making it ideal for use as a base station or access point.
- **Strong compatibility:** The standardized interface also ensures good compatibility with the vast majority of devices on the market that support this frequency band, such as LoRa gateways, industrial routers, and wireless data transmission radios.



2 Specifications

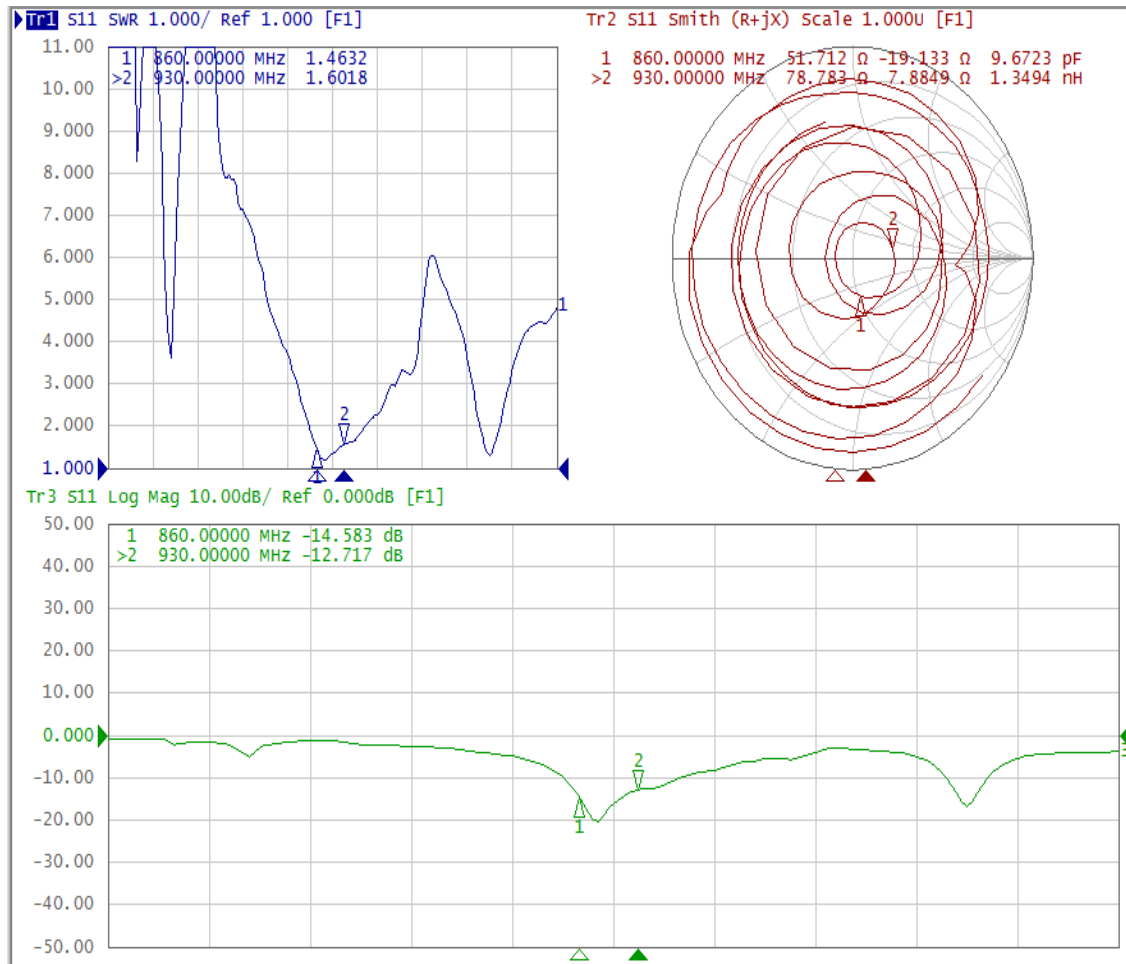
Part No.	Weight	Dimensions (L x W x H)	Cable	Connector	Color
M02-0400990R 0A	346.0g	Φ29.6*379mm	300mm RG316	RP-SMA MALE	White

PARAMETER	SPECIFICATION
Frequency (MHz)	860-930
VSWR (Max)	1.7:1
Peak Gain, dBi	3.07
Peak Efficiency, %	75.37
Nominal Impedance	50 Ω
Max Power (ambient temp of 25°C)	10 Watts
Azimuth Beam Width (deg)	Omnidirectional
Polarization	Linear
Radome	White
Storage Temperature Range (°C)	-40° C to +85° C
Operational Temperature Range (°C)	-40° C to +85° C
Material Substance Compliance	RoHS Compliant

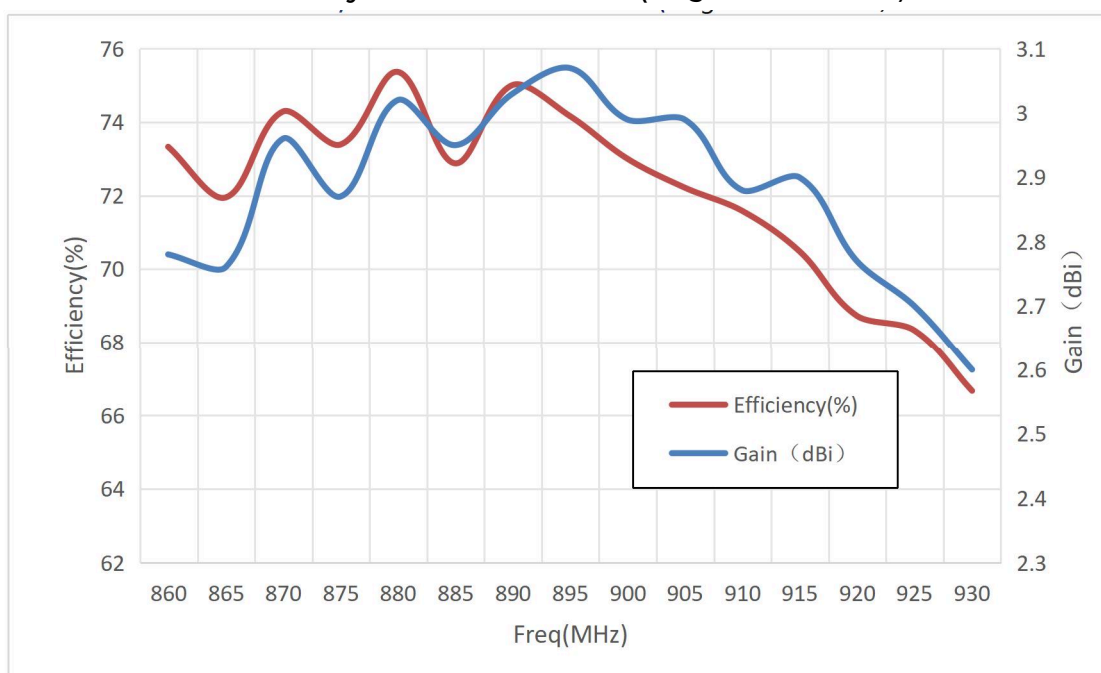
3 Performance

1. Electrical Data

Return Loss



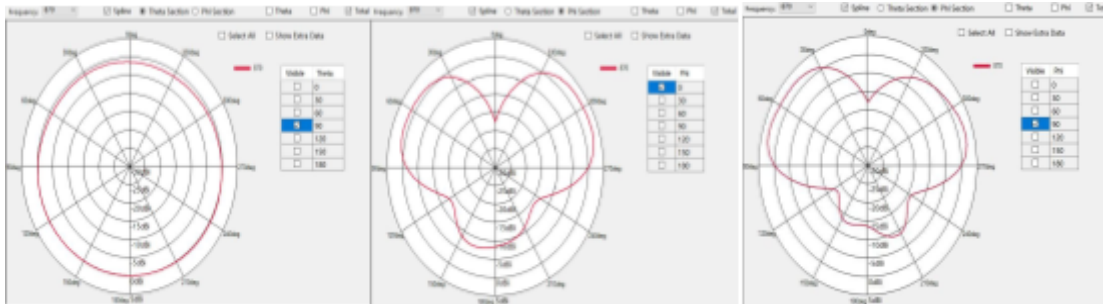
Efficiency(%) And Gain (dBi) (Single antenna test)



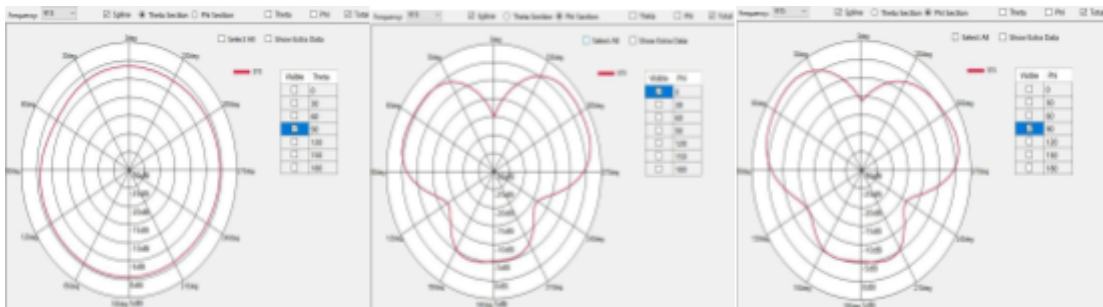
Freq(MHz)	Gain (dBi)	Efficiency(%)
860	2.78	73.33
865	2.76	71.95
870	2.96	74.29
875	2.87	73.39
880	3.02	75.37
885	2.95	72.88
890	3.03	75.01
895	3.07	74.17
900	2.99	73.01
905	2.99	72.22
910	2.88	71.59
915	2.90	70.49
920	2.77	68.73
925	2.70	68.33
930	2.60	66.67

2. Radiation Patterns

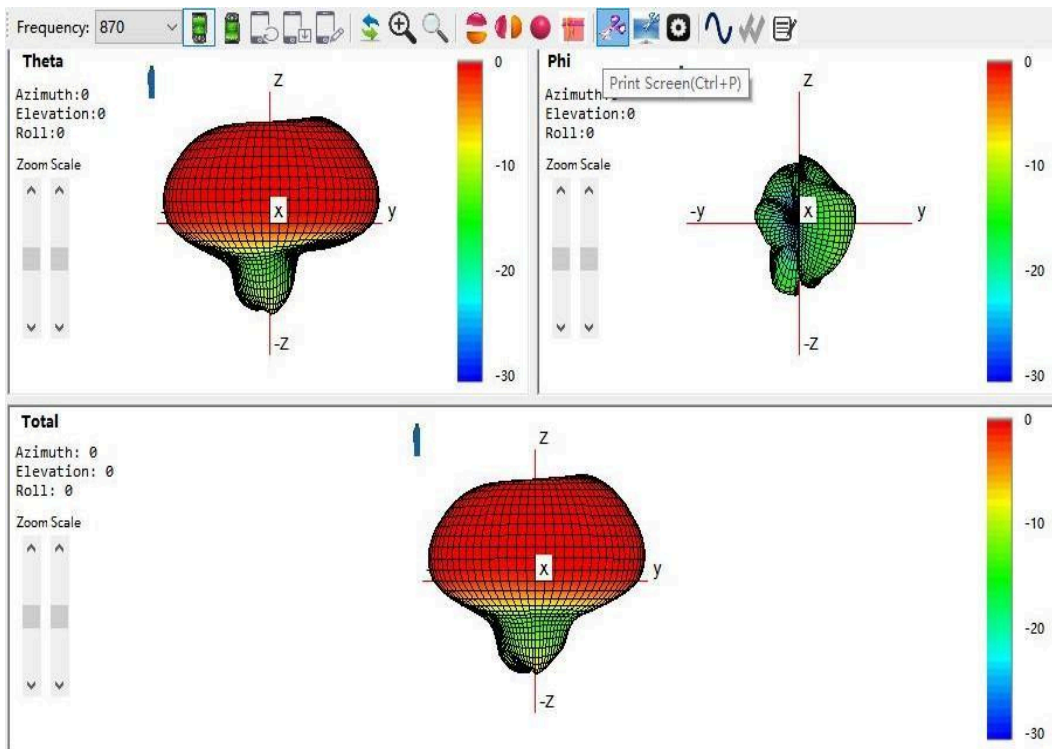
2D Radiation Pattern at 870MHz Gain=2.96 dBi



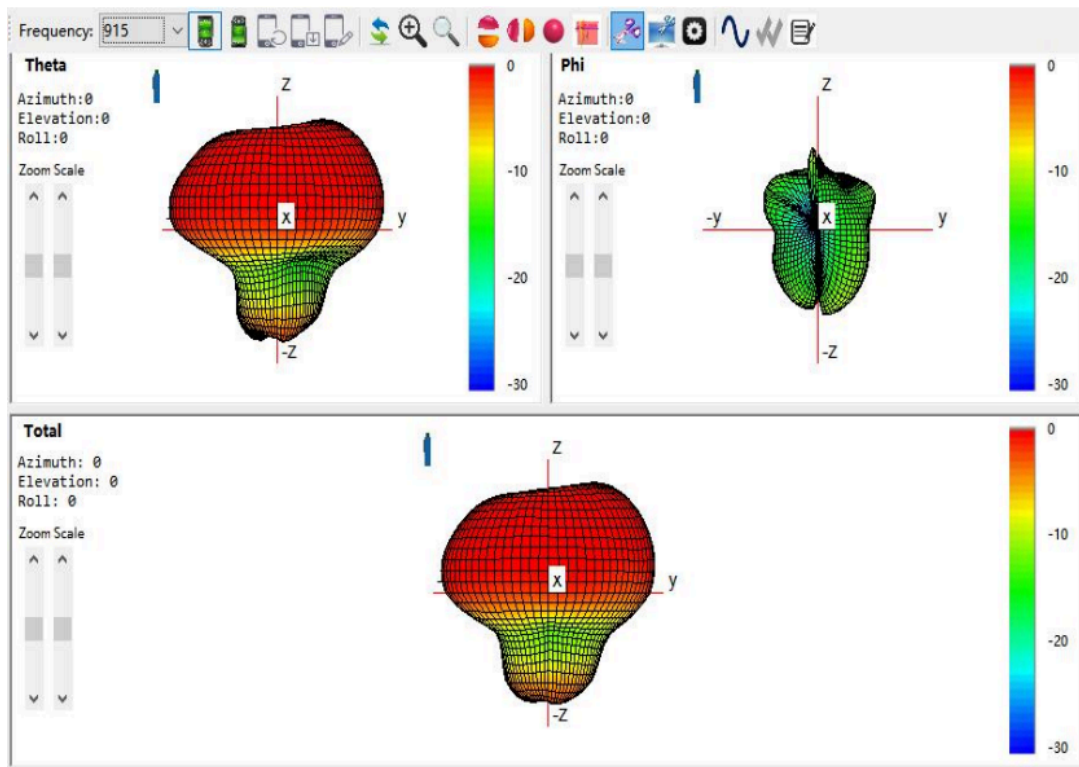
2D Radiation Pattern at 915MHz Gain=2.90 dBi



3D Radiation Pattern at 870MHz Gain=2.96 dBi



3D Radiation Pattern at 915MHz Gain=2.90 dBi



4 Dimensions

