

Standard Gain Horn Antenna
10dBi Typ. Gain, 17.6-26.7 GHz Frequency Range



Standard Gain Horn Antenna Data Sheet

RM-SGHA42-10

Features

- Wave-guide and Connector Interface
- Low Side-lobe
- Linear Polarization
- High Return Loss

Descriptions

RF MISO's **Model RM-SGHA42-10** is a linear polarized standard gain horn antenna that operates from 17.6 to 26.7 GHz. The antenna offers a typical gain of 10 dBi and low VSWR 1.3:1. The antenna has a typical 3dB beamwidth of 51.6 degrees on the E plane and 52.1 degrees on H plane. This antenna has flange input and coaxial input for customers to rotate. Antenna mounting brackets include ordinary L/I-type mounting bracket and rotating L-type bracket①

Specifications

Parameters	Specification		Unit
Frequency Range	17.6-26.7		GHz
Wave-guide	WR42		
Gain	10 Typ.		dBi
VSWR	1.3 Typ.		
Polarization	Linear		
3 dB Beamwidth, E-Plane	51.6° Typ.		
3 dB Beamwidth, H-Plane	52.1° Typ.		
Interface	FBP220(F Type)	SMA-Female(C Type)	
Material	Al		
Finishing	Paint		
C Type Size (L*W*H)	46.6*22.4*27.2(±5)		mm
Weight	0.01(F Type)	0.023(C Type)	kg
C Type Average Power	50		W
C Type Peak Power	3000		W
Operating Temperature	-40° ~+85°		° C

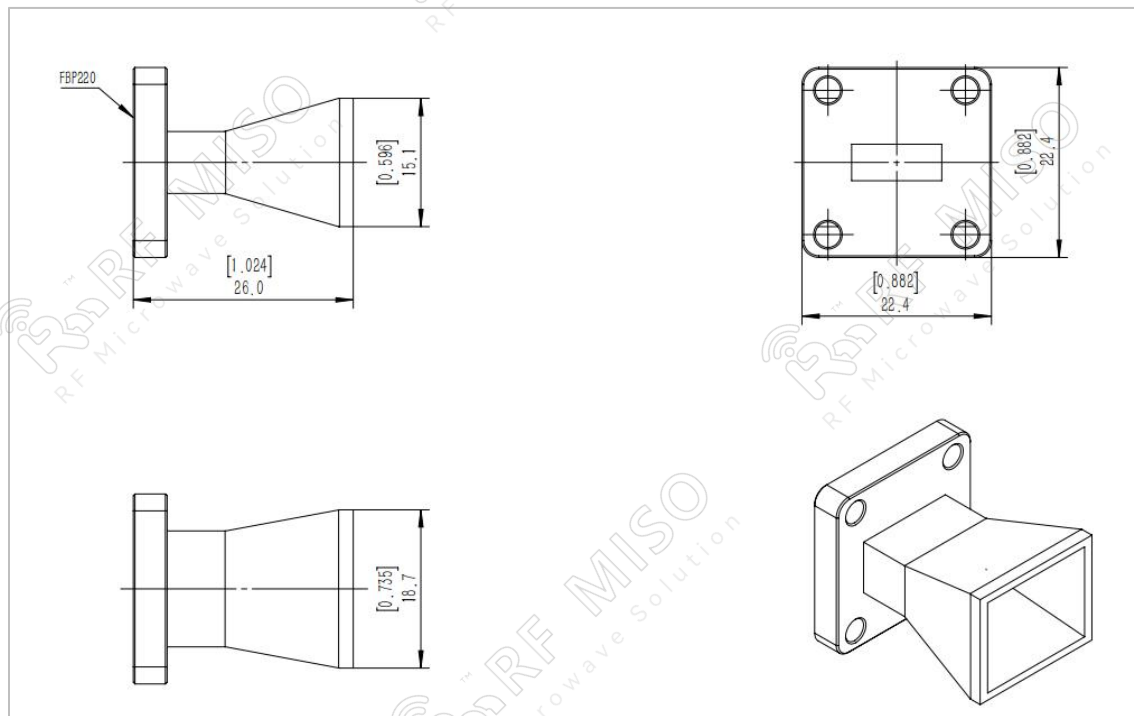
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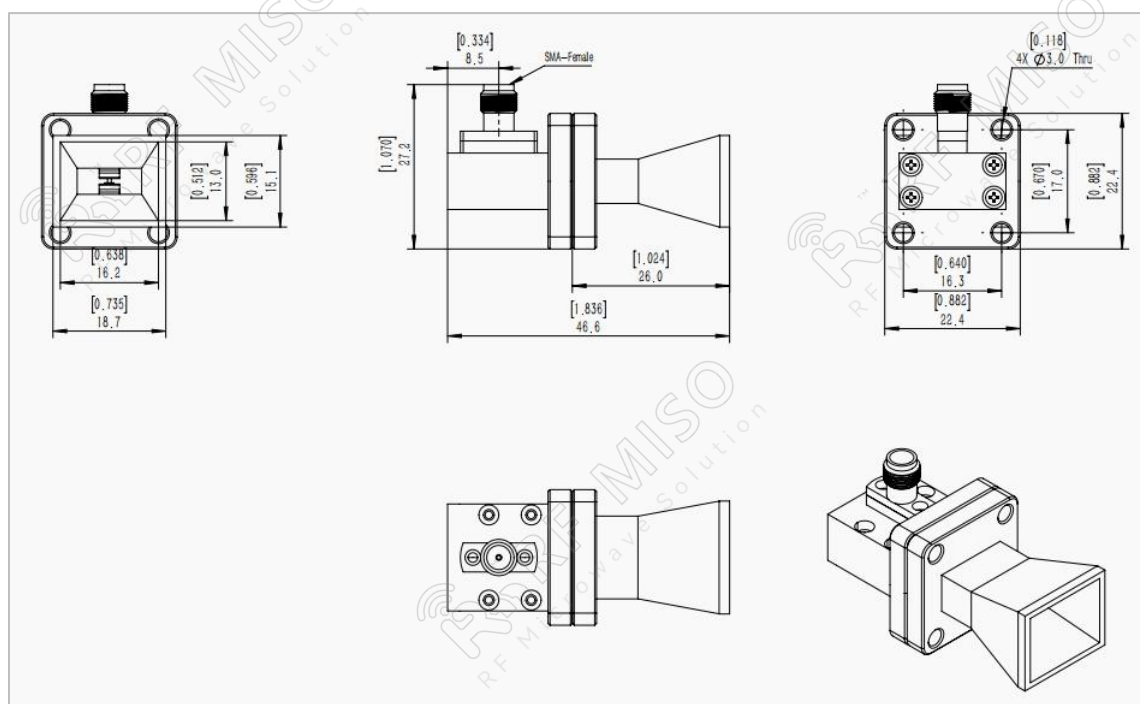
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F-Type Mechanical Drawing (P/N: RM-SGHA42-10F)



C-Type Mechanical Drawing (P/N: RM-SGHA42-10C)

2.92mm-type connector is available, please contact RF Miso.



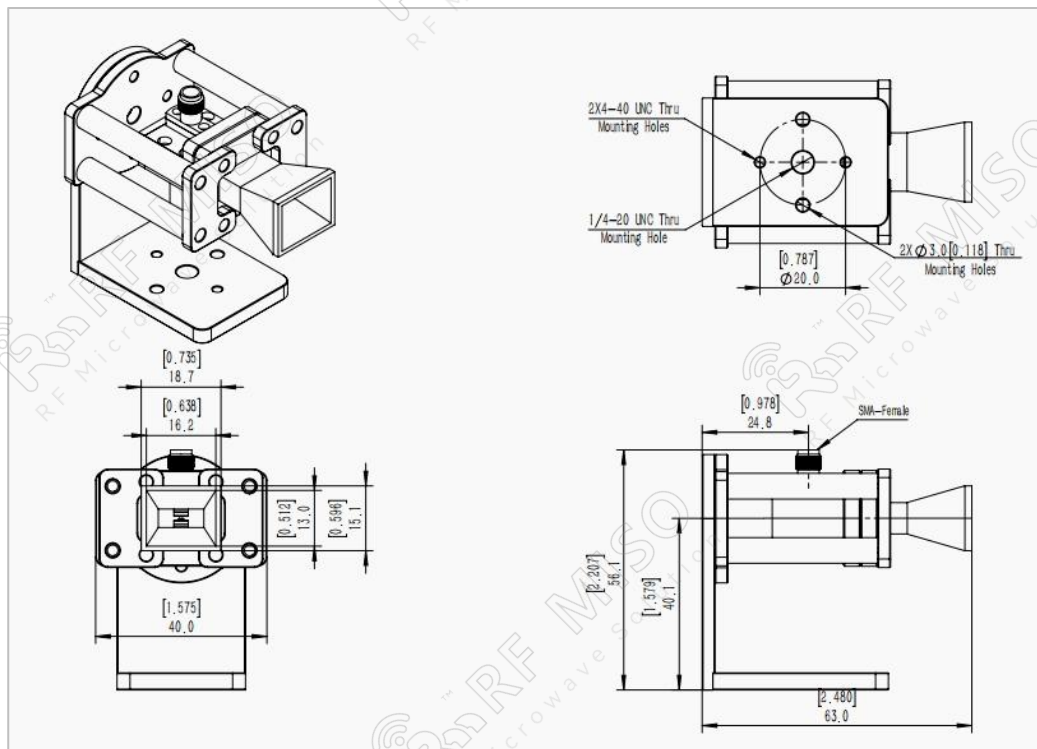
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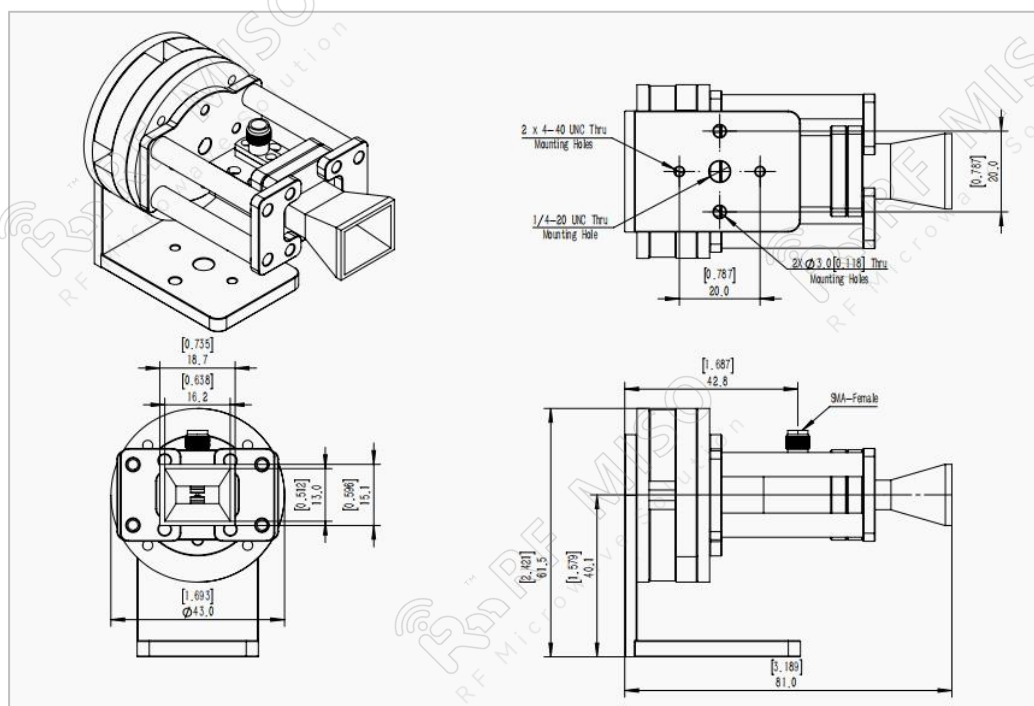
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Mechanical Drawing with Ordinary L-type Mounting Bracket (P/N: RM-SGHA42-10CL)



Mechanical Drawing with Rotating L-type Mounting Bracket (P/N: RM-SGHA42-10CR)



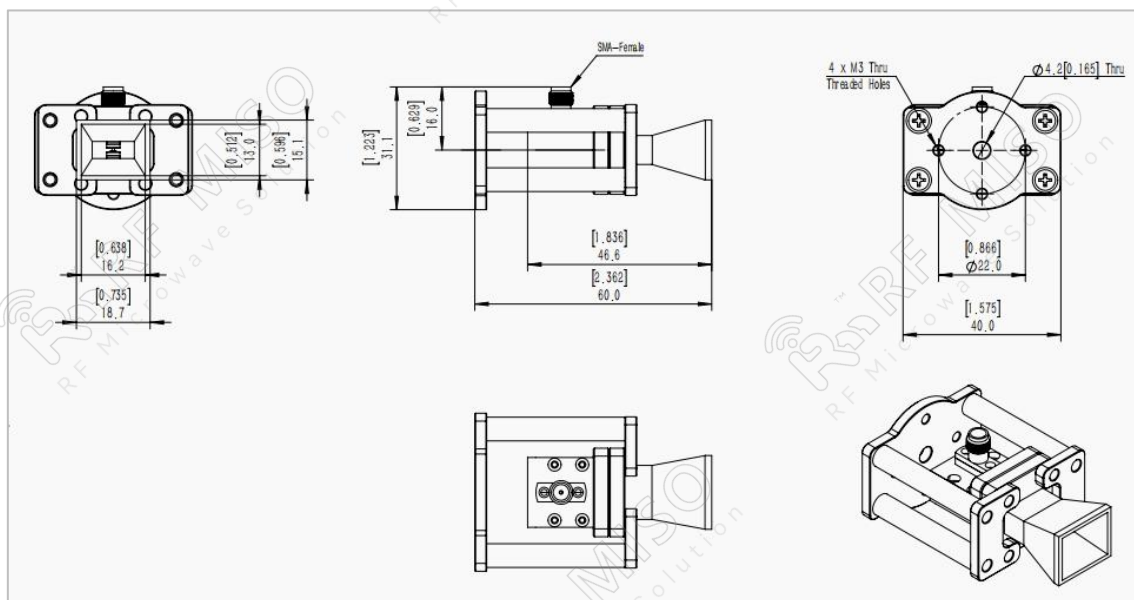
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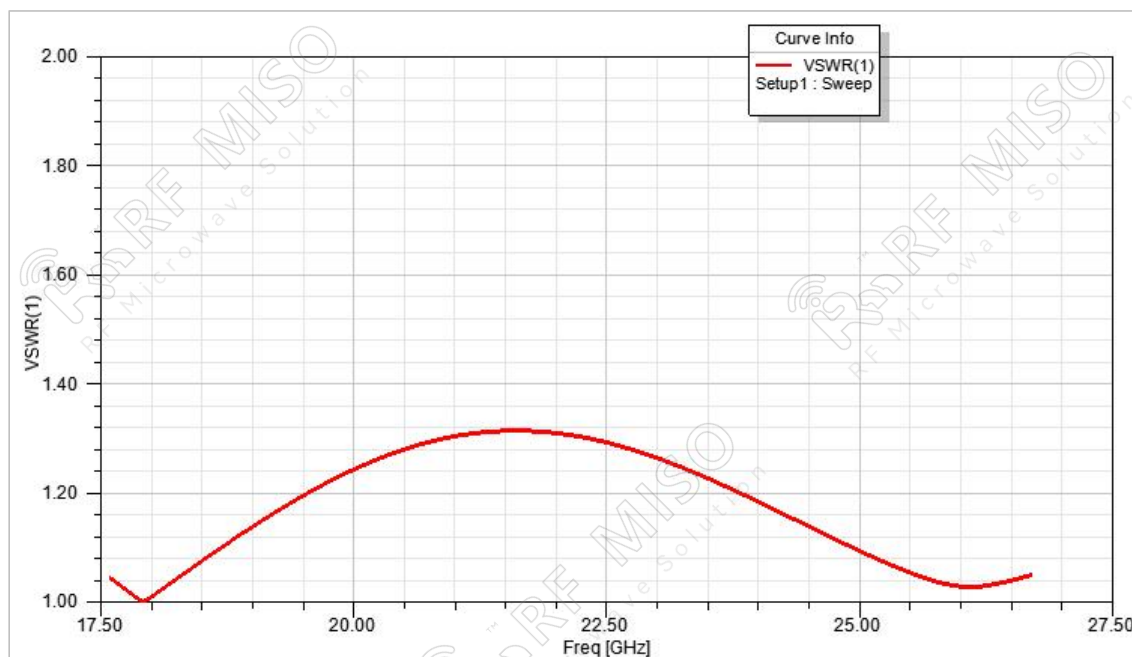
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Mechanical Drawing with Ordinary I-type Mounting Bracket (P/N: RM-SGHA42-10CI)



VSWR



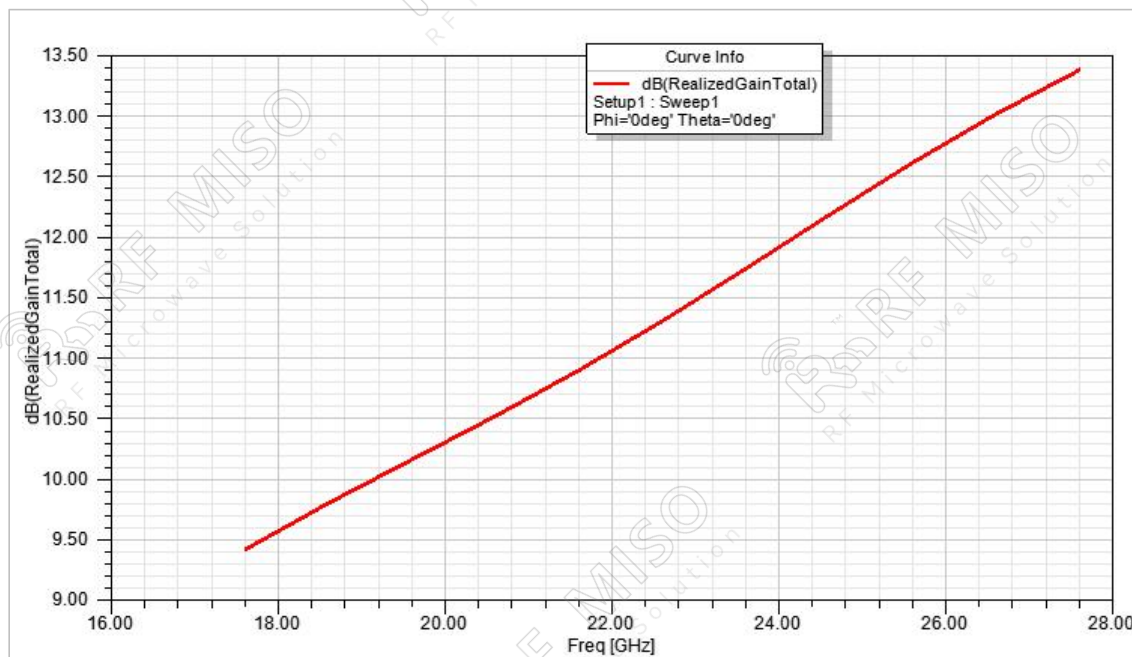


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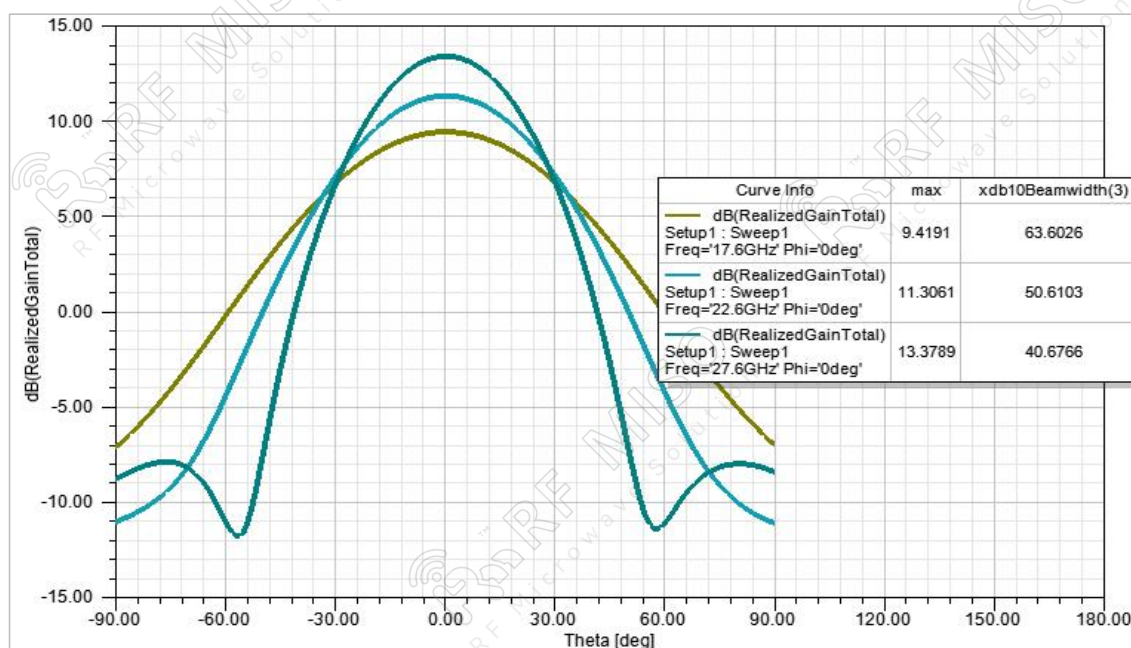
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Gain



Gain Pattern E-plane



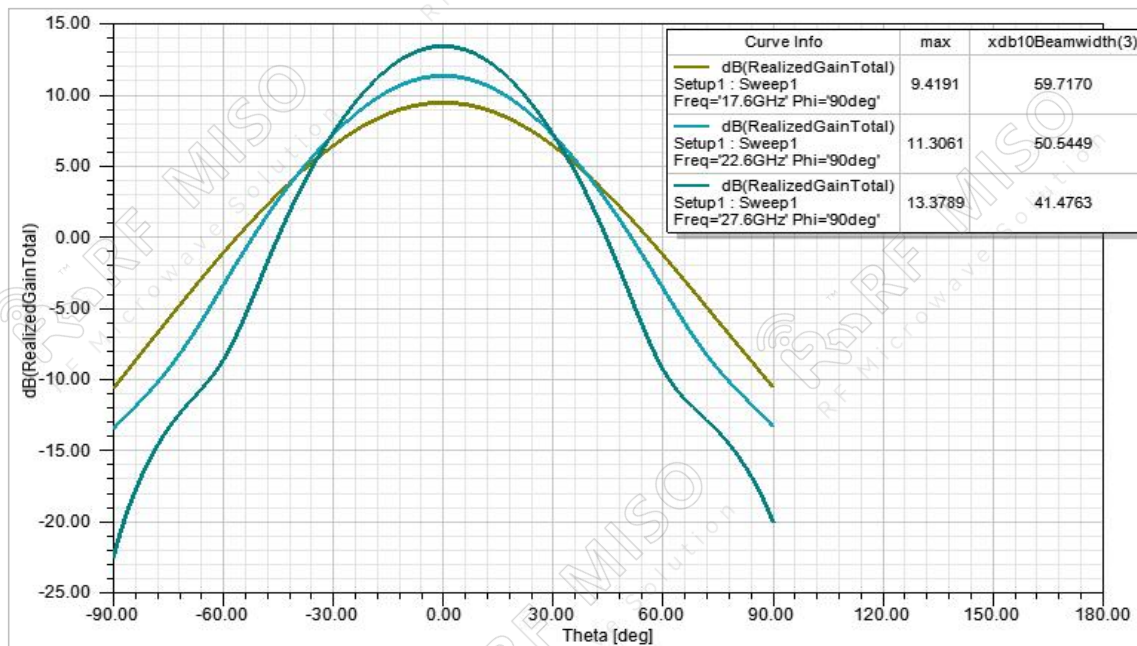
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Gain Pattern H-plane



① **Rotating L-type bracket:** The rotating bracket is used for antenna polarization adjustment, and the tooling integrated with the bracket can precisely adjust the polarization directions of 0° , 45° , and 90° to ensure the accuracy and consistency of the calibration results.

Note:

- If the data presented is simulated. Actual data may vary unit to unit, slightly.
- Any foreign objects in the wave-guide will cause performance degradation and possible device damage.
- We can customize antennas according to your specific needs.