



Dual Polarized Horn Antenna Data Sheet

RM-DPHA10-20

Features

- Full Band Performance
- Dual Polarization
- High Isolation
- Precisely Machined and Gold Plated

Description

The **RM-DPHA10-20** is a full-band, dual-polarized, WR-10 horn antenna assembly that operates in the frequency range of 75 to 110 GHz. The antenna features an integrated orthogonal mode converter that provides high port isolation. The RM-DPHA10-20 supports vertical and horizontal waveguide orientations and has a typical 35 dB cross-polarization isolation, a nominal gain of 20 dBi at the center frequency, a typical 3db beamwidth of 16 degrees in the E-plane, a typical 3db beamwidth of 18 degrees in the H-plane. The input to the antenna is a WR-10 waveguide with a UG-385/U-M threaded flange.

Specifications

RM-DPHA10-20		
Item	Specification	Units
Frequency Range	75-110	GHz
Gain	20 Typ.	dBi
VSWR	1.4:1 Typ.	
Polarization	Dual	
3dB Beam width E plane	16 Typ.	Degrees
3dB Beam width H plane	18 Typ.	Degrees
Port Isolation	45 Typ.	dB
Waveguide Size	WR-10	
Flange Designation	UG-387/U-Mod	
Size	61.2*20*20	mm
Weight	0.085	Kg
Body Material and Finish	Cu, Gold	

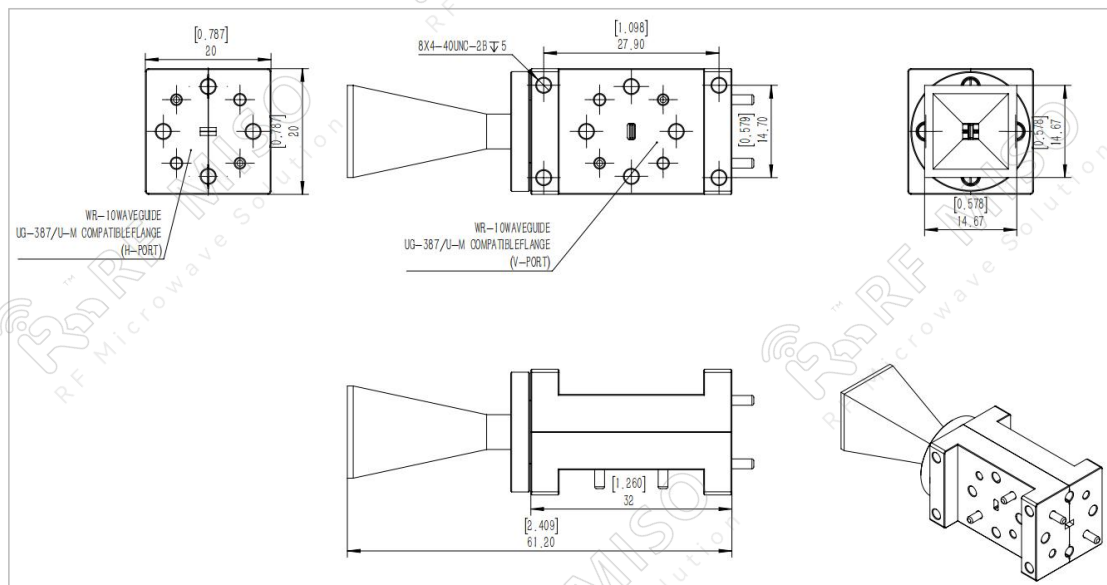
Dual Polarized Horn Antenna
20dBi Typ.Gain, 75GHz-110GHz Frequency Range



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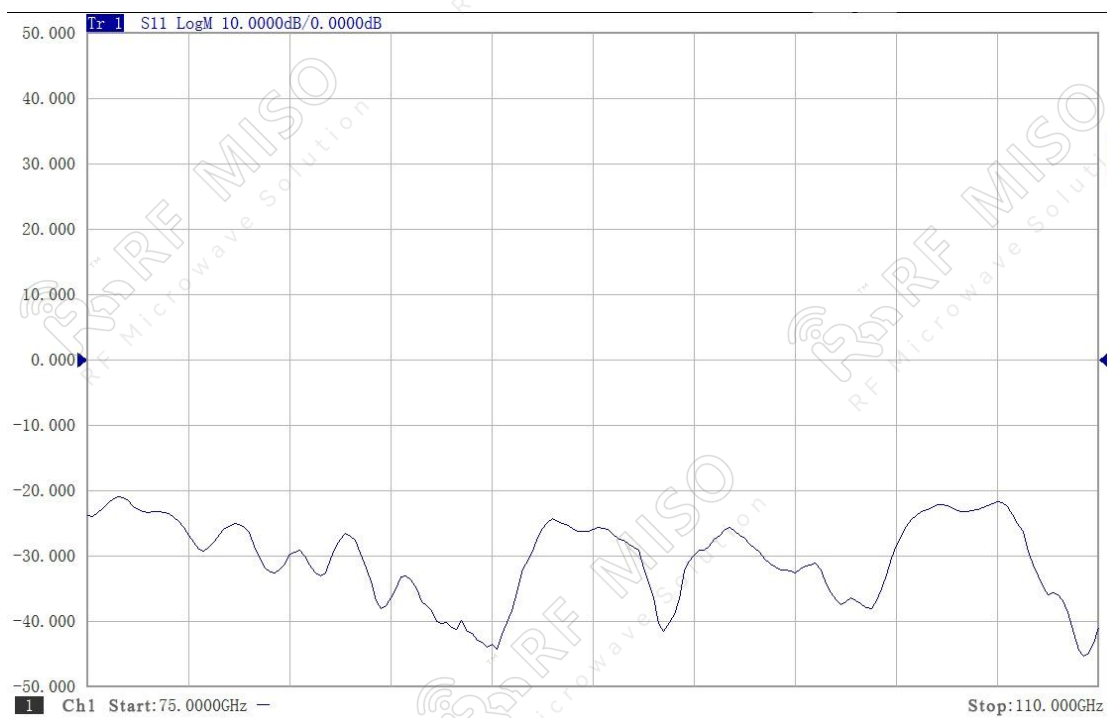
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Outline Drawing



Testing Result

VSWR



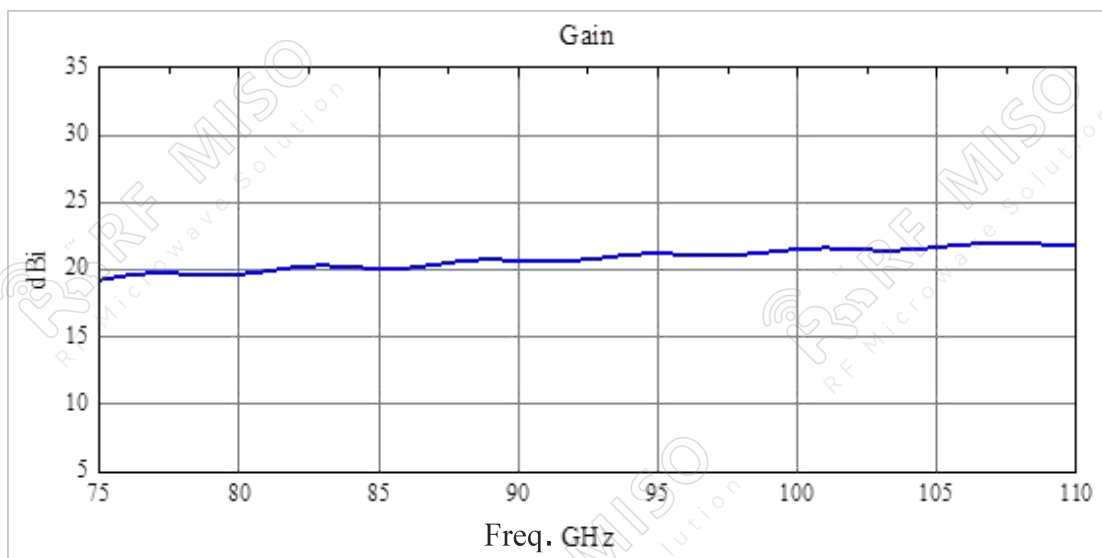
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Simulated Data

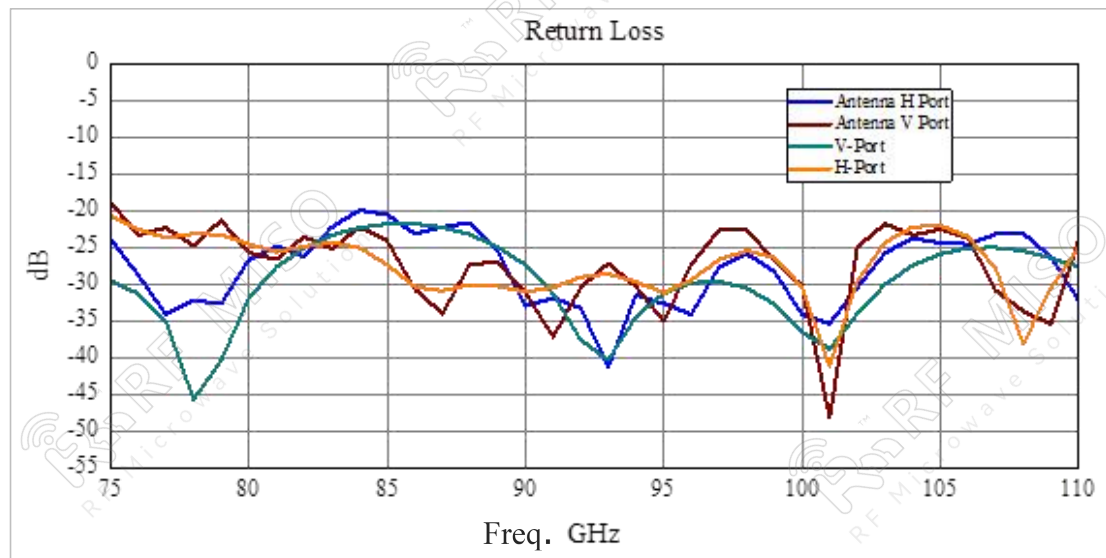
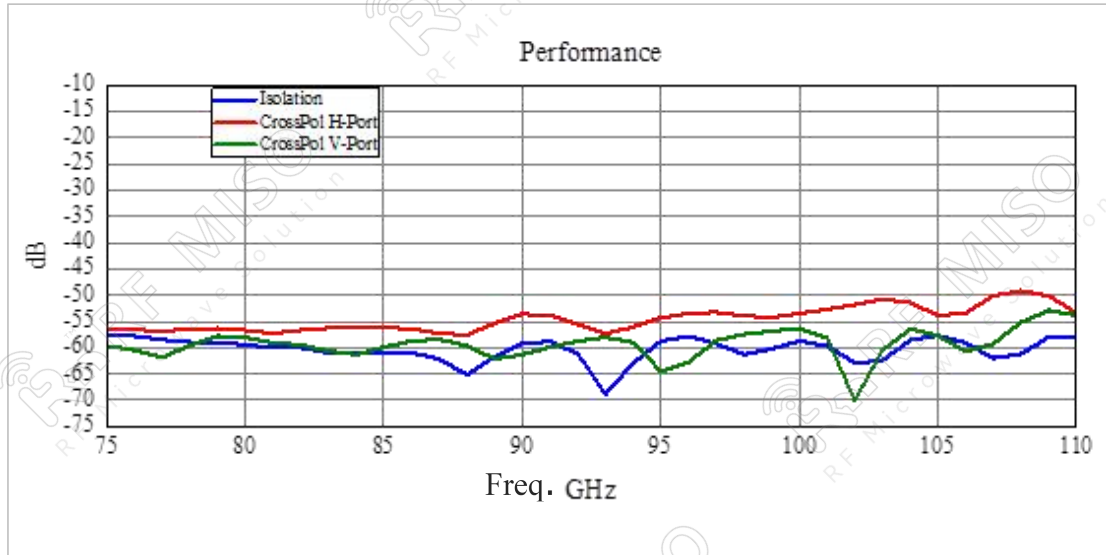




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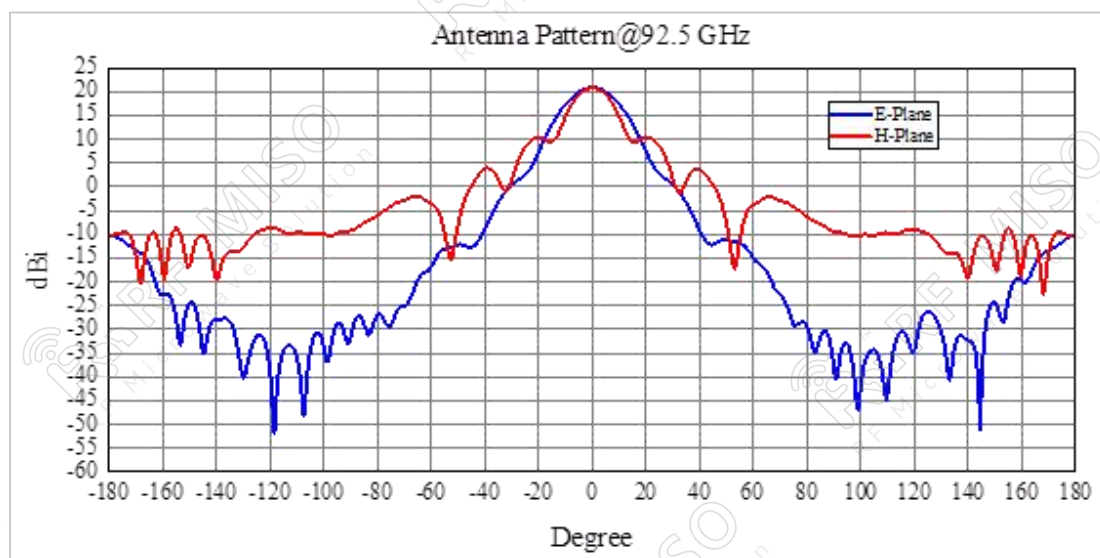
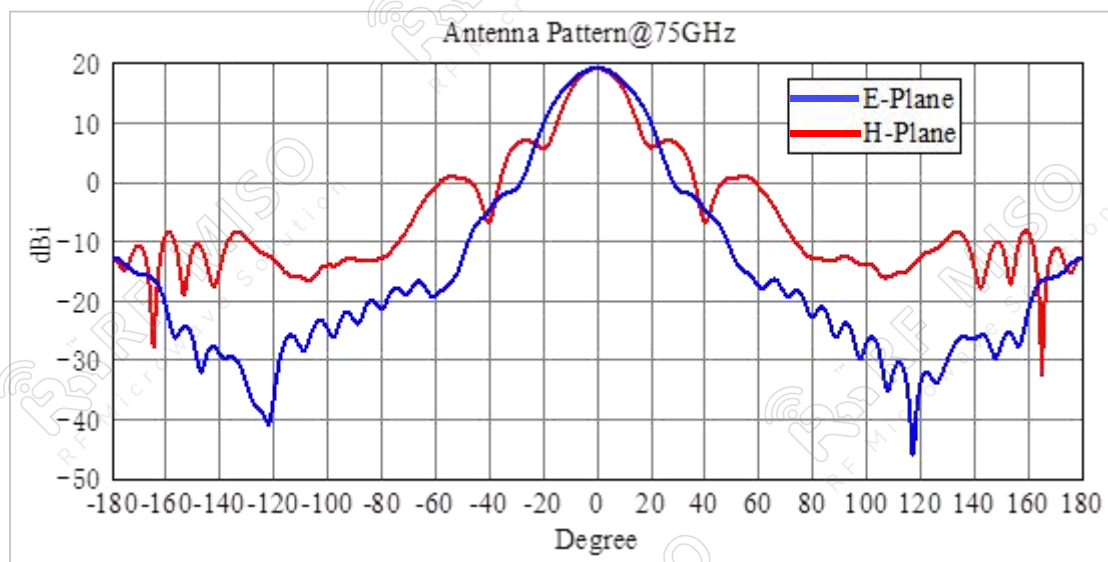




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