



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

Dual Polarized Horn Antenna Data Sheet

RM-DPHA75110-20

Features

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

Description

The **RM-DPHA75110-20** 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-DPHA75110-20 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-DPHA75110-20 | | |
|--------------------------|---------------|---------|
| 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 | |

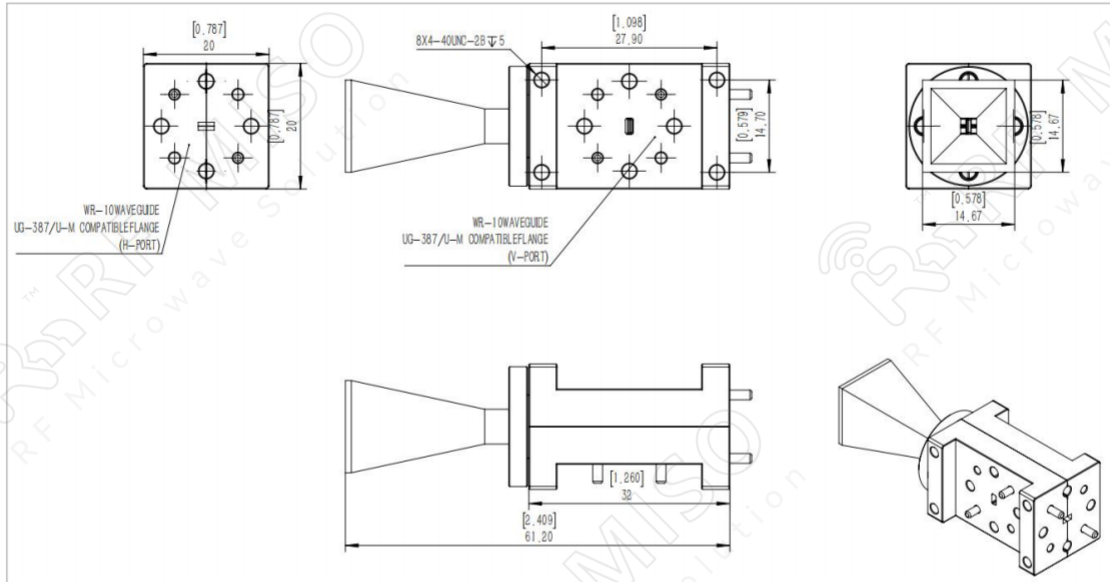


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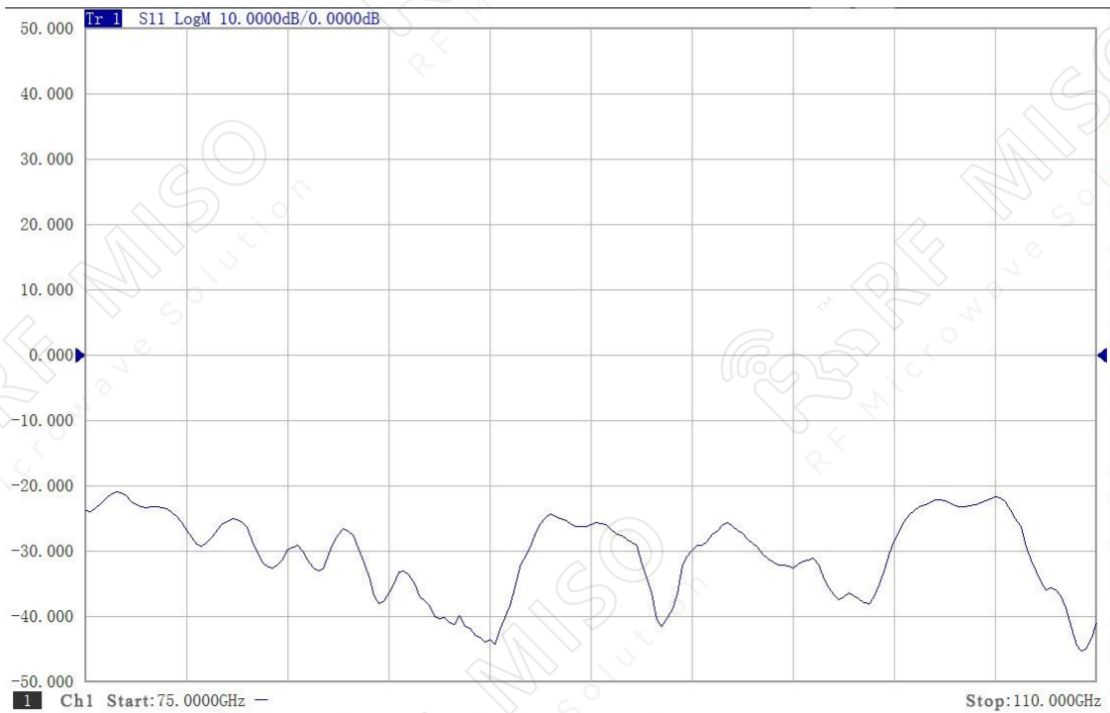
RM-DPHA75110-20

Outline Drawing



Testing Result

VSWR



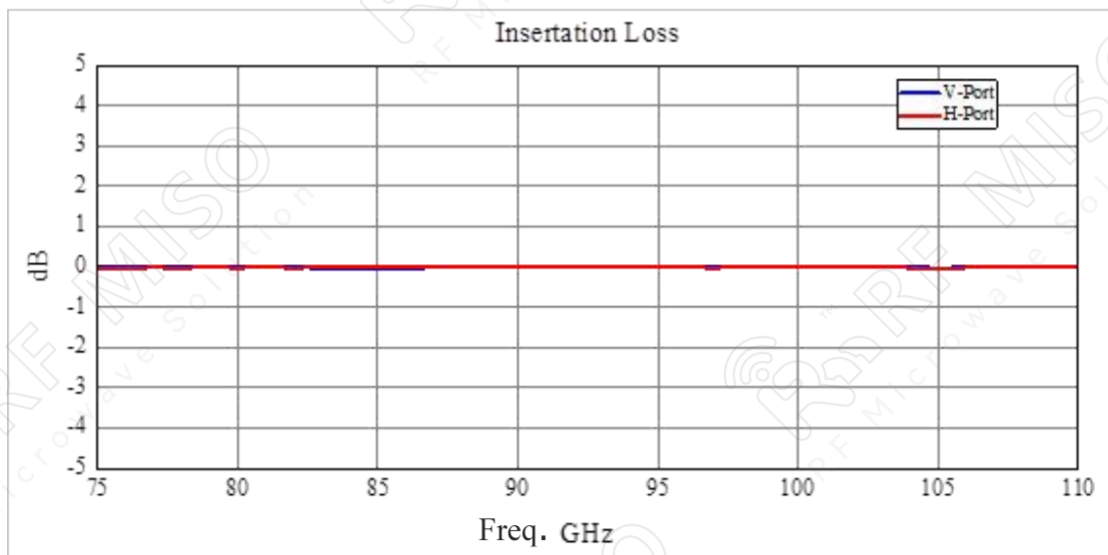
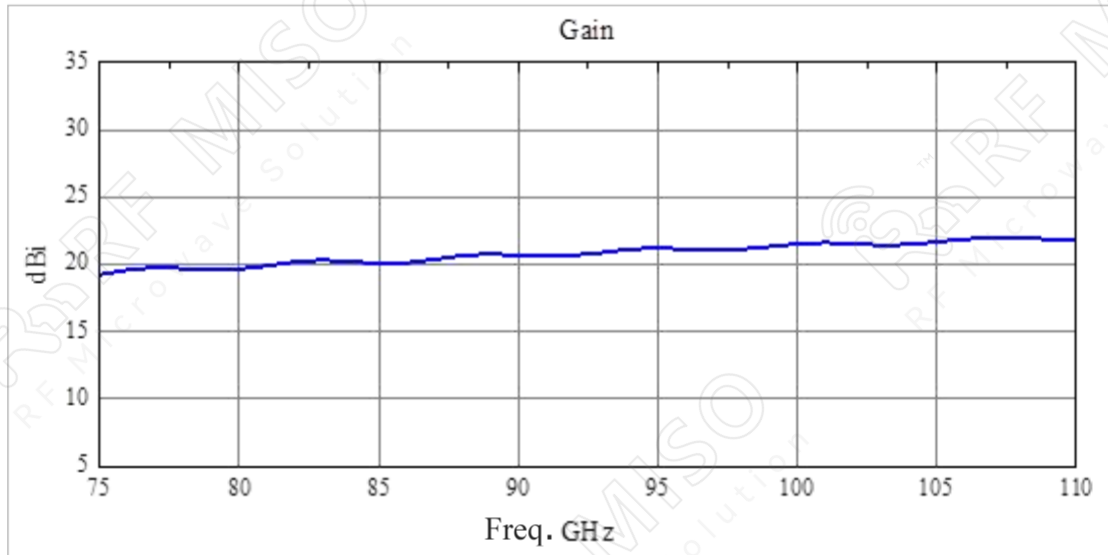


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Simulated Data

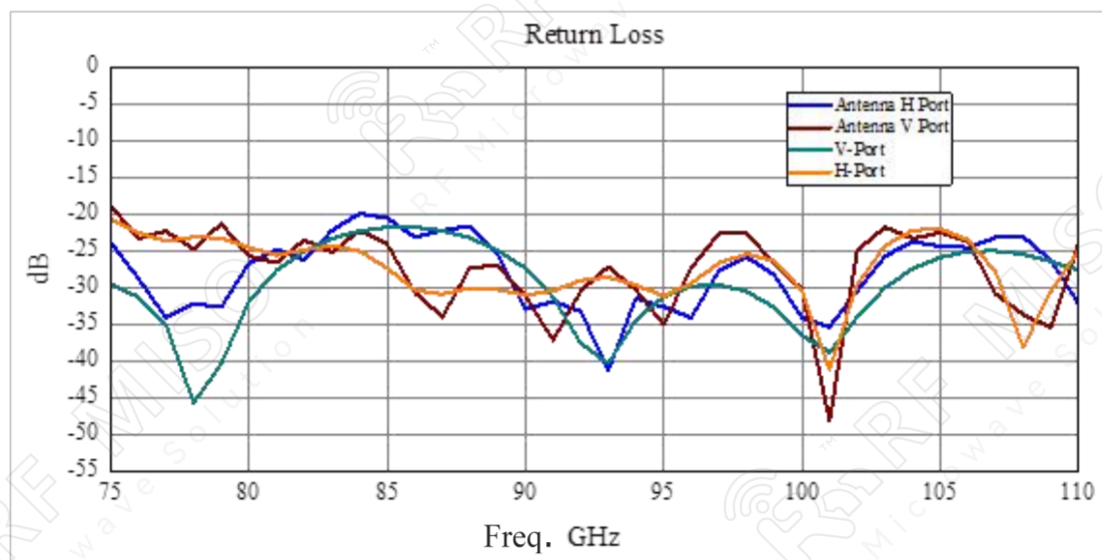
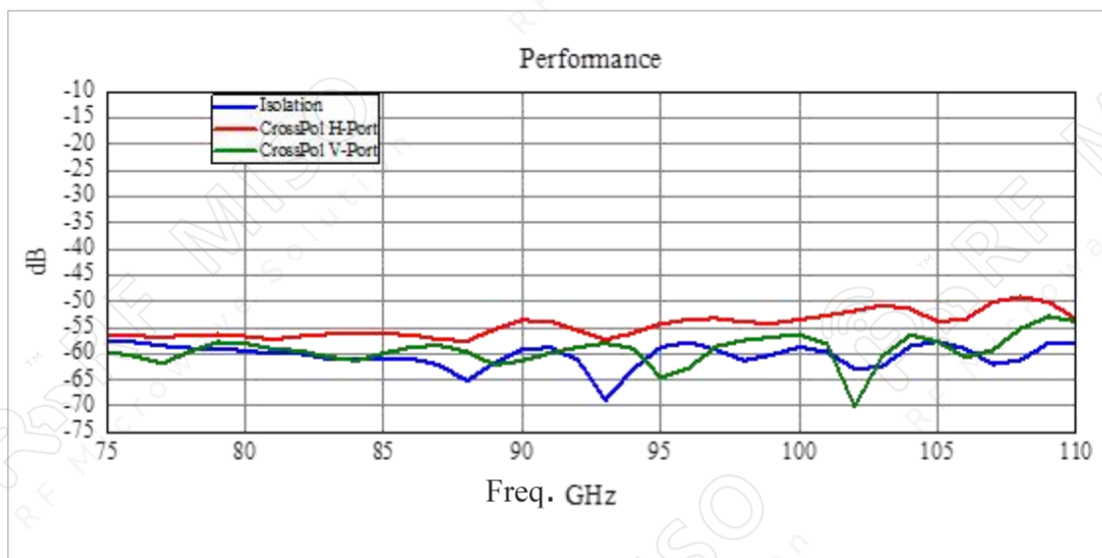




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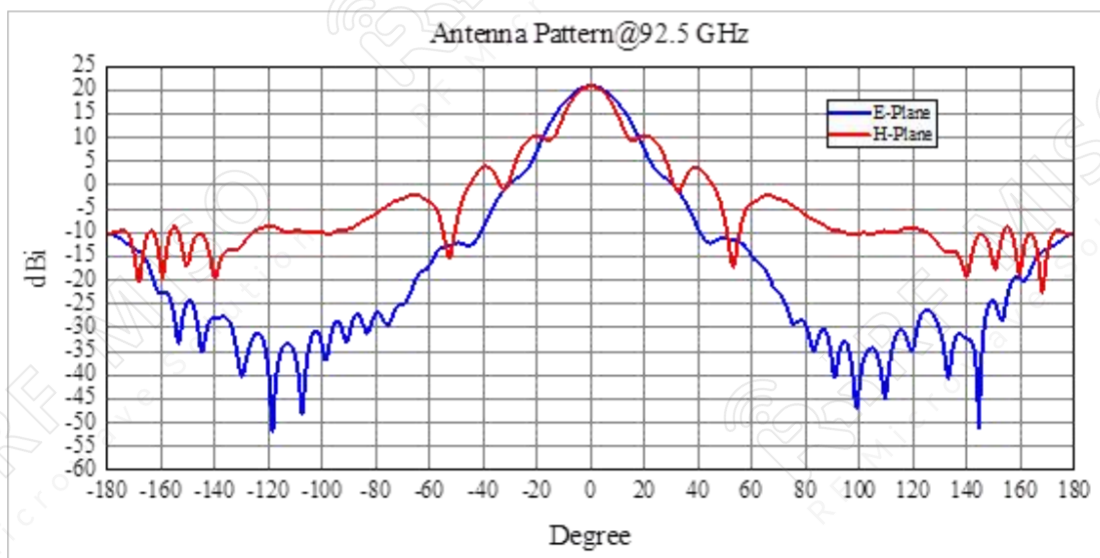
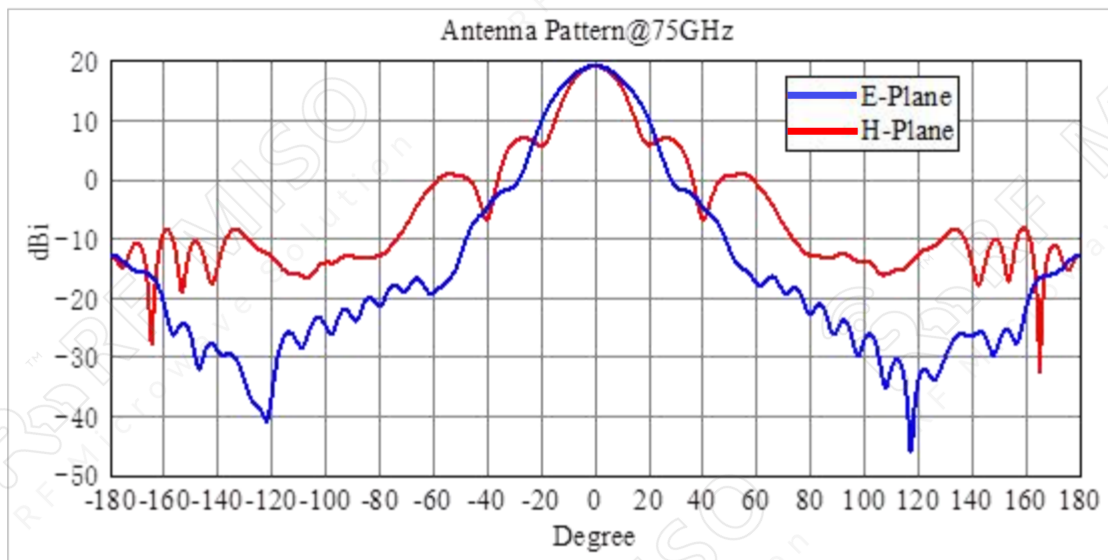




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