

# Dual Polarized Feed

ANT-DPF-10-15

## SPECIFICATIONS

Model	ANT-DPF-10-15
Frequency Range (GHz)	10.0–15.0
Max Power (W)	50
Waveguide Type	WR-75
Connector Type	N-Female (2)
Band	X-Ku
Material	Aluminum

## DIMENSIONS

Width: cm (in.)	37 (14.6)
Height: cm (in.)	20.3 (8)
Depth: cm (in.)	20.3 (8)
Weight: kg (lb)	0.9 (2)



## FEATURES

- Low gain, broad beamwidth illumination
- Low cross-polarization
- Constant beamwidth
- Dual-linear polarization
- Customizable beamwidth available

## IDEAL FOR

- Compact range testing
- Near-field testing
- Unit under test (UUT) illumination

## DESCRIPTION

NSI-MI offers a dual polarized feed (ANT-DPF) designed to operate over a standard rectangular waveguide band covering a 10 to 15 GHz frequency range. This feed combines a high-performance broadband orthomode transducer with a precision circular waveguide feeding a circularly symmetric waveguide aperture. The two ports of the feed excite two orthogonal modes in the circular guide which radiate orthogonal linearly-polarized fields with cross-polarization suppression better than 35 dB.

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## GENERAL CHARACTERISTICS

Cross-polarization discrimination	> 35 dB
Interport isolation (Port-to-Port)	> 30 dB
Operating temperature range	10°C–50°C
Gain (nominal)	10 dBi $\pm$ 0.5 dBi
3 dB beamwidth	57° $\pm$ 4°

## PRE-ALIGNED FEEDS

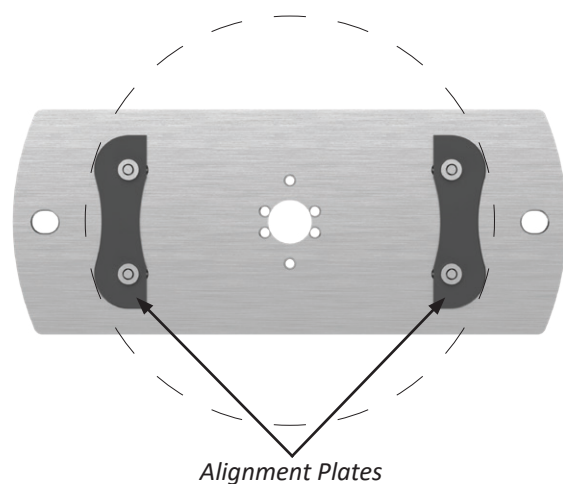
The ANT-DPF feeds are pre-aligned at the factory using a highly accurate alignment procedure, ensuring simple customer installation.

## INCLUDES

- ANT-DPF Dual Polarized Feed
- User manual

## AVAILABLE ADD-ONS

- Gain and pattern calibration
- Mounting hardware
- Absorber panel

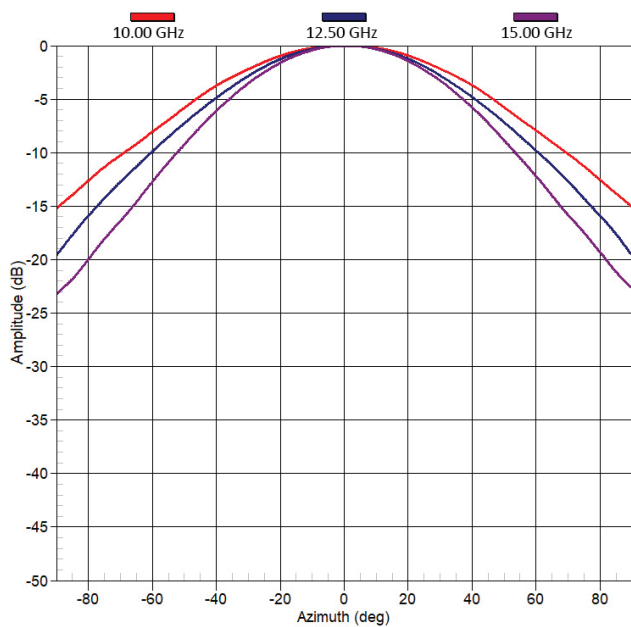


# Dual Polarized Feed

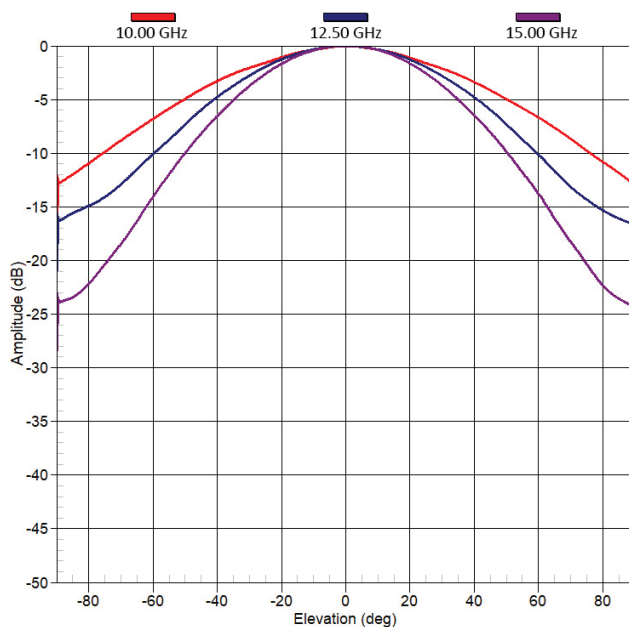
ANT-DPF-10-15

## TYPICAL MEASURED DATA

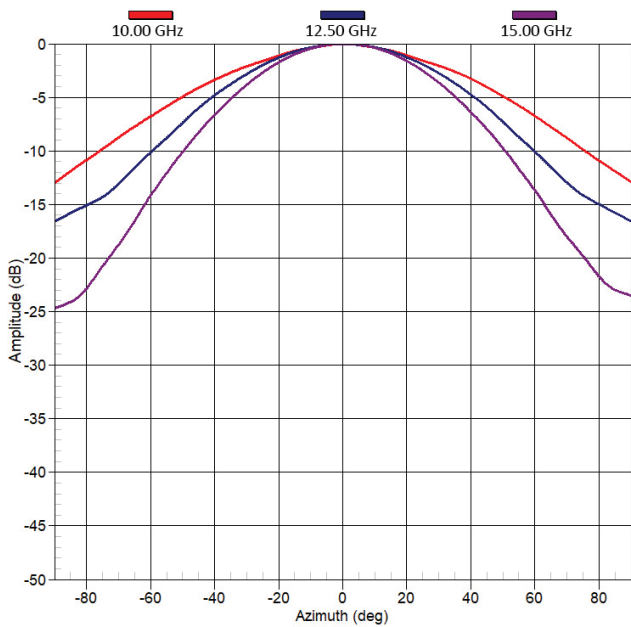
### PORT 1 Horizontal-Cut



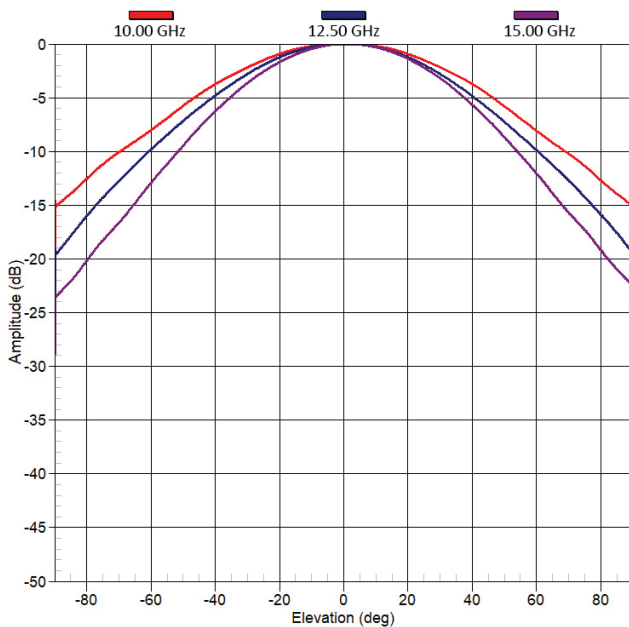
### PORT 1 Vertical-Cut

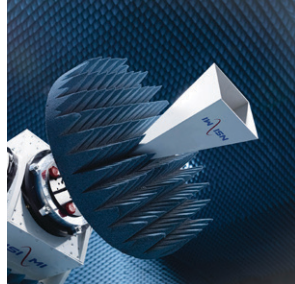
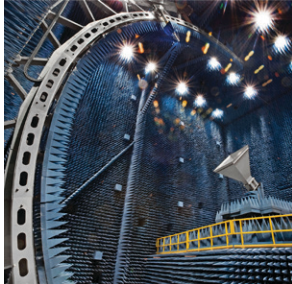
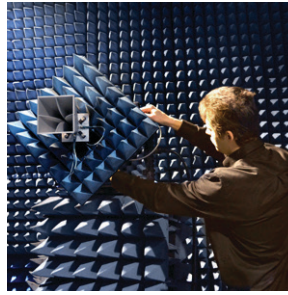
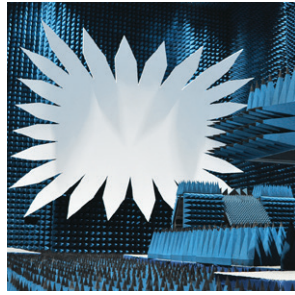
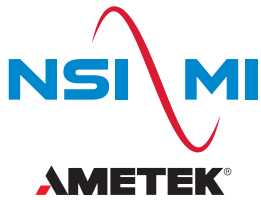


### PORT 2 Horizontal-Cut



### PORT 2 Vertical-Cut





## LOCATIONS

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**NSI-MI Technologies** introduced the world to microwave antenna measurement systems and is the preferred global supplier of antenna, radar cross section, and radome measurement solutions. Today, our innovative products, systems, and services lead the industry in setting new standards for tomorrow's performance. From world-class in-house testing facilities to delivering industry-leading turnkey systems, we provide the highest quality measurement products on the market.

Our full range of standard products and custom-designed systems are backed by our longstanding commitment to precision-engineered accuracy, reliability, and lasting performance. We provide the right solution for every RF measurement need and our worldwide network of service professionals are always available to offer support.

For more information on ordering NSI-MI Technologies' products, applications or services please contact your nearest NSI-MI office. Our complete sales team information is available at: [www.nsi-mi.com/contact-us](http://www.nsi-mi.com/contact-us)

## ISO 9001:2015 CERTIFIED

