

# Dual Polarized Feeds



ANT-DPF



## FEATURES

- Excellent Low Gain, Broad Beamwidth Illumination Source
- Low Cross Polarization
- Constant Beamwidth
- Dual Linear Polarization
- Customizable Beamwidth Available

## IDEAL FOR

- Compact Range Testing
- Near-Field Testing
- UUT Illumination

## DESCRIPTION

NSI-MI Technologies' Dual Polarized Feeds (ANT-DPF) are designed to operate over a standard rectangular waveguide band covering frequencies from 1.12 to 60 GHz. These feeds combine a high performance broadband orthomode transducer with 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.

## INCLUDES

- ANT-DPF Dual Polarized Feed
- User Manual

## AVAILABLE ADD-ONS

- Gain and Pattern Calibration
- Mounting Hardware
- Absorber Panel

## GENERAL CHARACTERISTICS

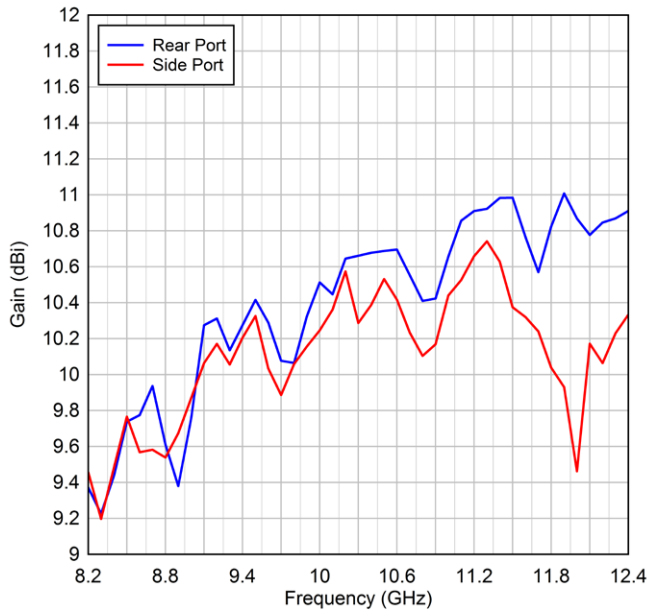
Cross-Polarization Discrimination	> 35 dB
Interport Isolation (Port-to-Port)	> 30 dB
Operating Temperature Range	10°C–50°C
Gain (Nominal)	10 dBi $\pm$ 0.5 dBi
3 dB Beamwidth	57° $\pm$ 4°
Max Power	50 Watts (N-Female), 15 Watts (2.92 mm), 10 Watts (2.4 mm)

## SPECIFICATIONS

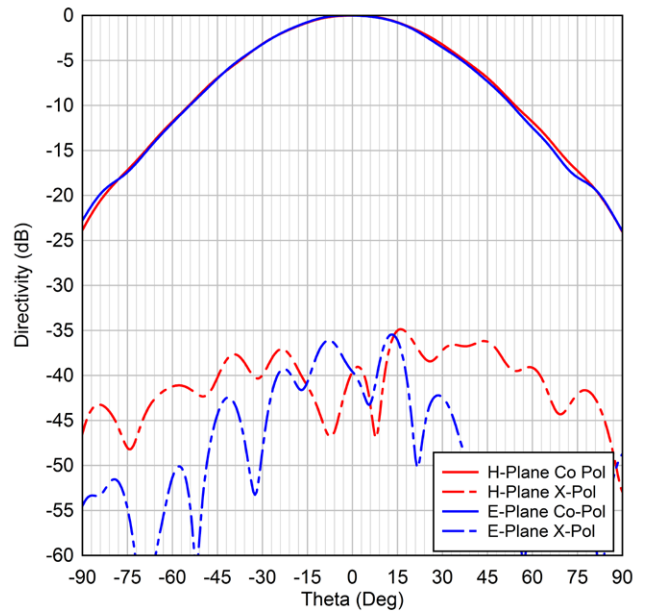
Model	Frequency Range (GHz)	Band	Polarization	Connector Type (Qty)	Feed Weight (kg (lb))
ANT-DPF-1.12-1.7	1.12–1.7	L	Dual Linear	N-Female (2)	28.6 (63)
ANT-DPF-1.7-2.6	1.7–2.6	LS	Dual Linear	N-Female (2)	14.1 (31)
ANT-DPF-2.6-3.95	2.6–3.95	S	Dual Linear	N-Female (2)	10.5 (23)
ANT-DPF-3.95-5.85	3.95–5.85	C	Dual Linear	N-Female (2)	3.4 (7.5)
ANT-DPF-5.85-8.2	5.85–8.2	XN	Dual Linear	N-Female (2)	2.1 (4.7)
ANT-DPF-8.2-12.4	8.2–12.4	X	Dual Linear	N-Female (2)	0.9 (2)
ANT-DPF-10-15	10.0–15.0	X-Ku	Dual Linear	N-Female (2)	0.9 (2)
ANT-DPF-10-15-CP	10.0–15.0	X-Ku	Dual Circular	N-Female (2)	1.4 (3)
ANT-DPF-12.4-18	12.4–18.0	Ku	Dual Linear	N-Female (2)	0.9 (2)
ANT-DPF-18-26.5	18.0–26.5	K	Dual Linear	2.92 mm (2)	0.3 (0.6)
ANT-DPF-26.5-40	26.5–40.0	Ka	Dual Linear	2.92 mm (2)	0.2 (0.4)
ANT-DPF-33-50	33.0–50.0	Q	Dual Linear	2.4 mm (2)	0.2 (0.4)
ANT-DPF-40-60	40.0–60.0	U	Dual Linear	Waveguide	0.2 (0.4)

# TYPICAL MEASURED DATA

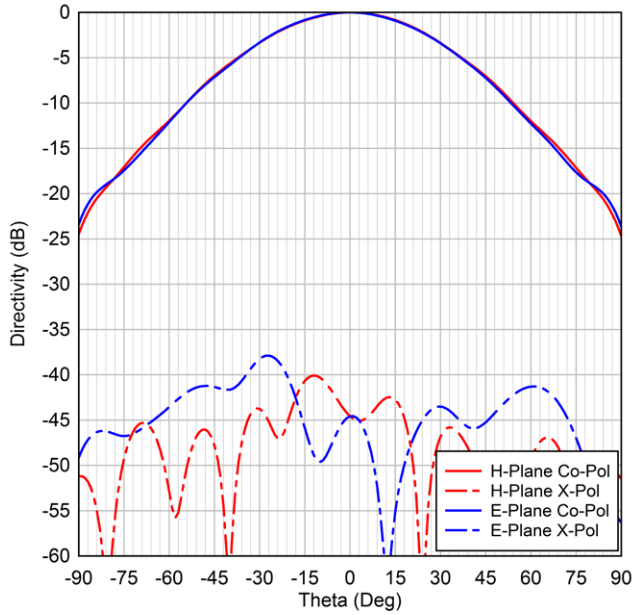
### ANT-DPF-8.2-12.4 Gain

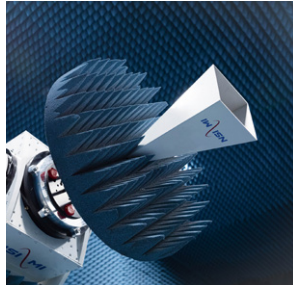
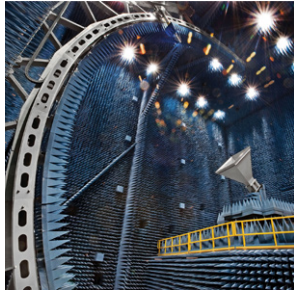
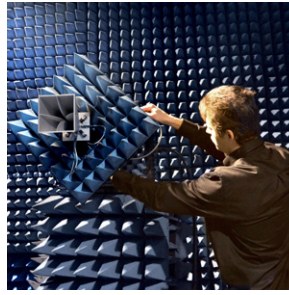
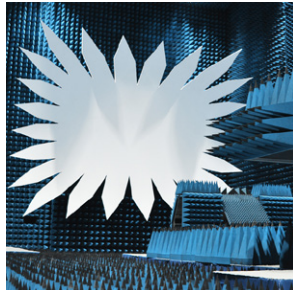
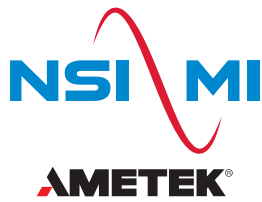


### ANT-DPF-8.2-12.4 Directivity at 10.2 GHz (Rear Port)



### ANT-DPF-8.2-12.4 Directivity at 10.2 GHz (Side Port)





## LOCATIONS

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**AMETEK 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.

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## ISO 9001:2015 CERTIFIED

