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

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

IDEAL FOR
• Compact Range Testing
• Near-Field Testing
• UUT Illumination
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 ±0.5 dBi

3 dB Beamwidth  
57° ±4°

Max Power  
50 Watts (N-Female), 15 Watts (2.92 mm), 10 Watts (2.4 mm)

SPECIFICATIONS

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

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)