Harris Q156 Series of Polarizing Grids provide for the reception of almost all signal polarizations when fitted to standard Horizontal-polarized horn apertures. The Q156 Series polarizing grids consist of a multilayer grid structure with lightweight, low-loss, foam core material and provide reception for Horizontal, Vertical, Slant +45, and Circular (RH- and LH-) polarizations. An epoxy fiberglass open-faced shell provides the necessary rigidity for flight applications without interfering with antenna reception patterns. The Q156 Series are designed for ESM and EW applications and are suitable for a wide variety of airborne applications. The grids are designed to interface with antenna elements have a wide angle of view in the azimuth plane and a moderate angle of view in the elevation plane, and have been designed to provide repeatable, unit-to-unit, phase tracking. Within the series, key features are described for each model below:

**SPECIFICATIONS FOR: Q156 SERIES POLARIZING GRIDS**

### ELECTRICAL

**Frequency Range**

-1, -2, -5, -6  
-3, -4, -7  
2-6GHz  
6-18GHz

**Number of Apertures Covered**

-2, -3, -5, -7  
-4, -6  
-1  
Single  
Triple  
Quad

**Input Polarization**

-1 thru -6  
-7  
Slant 45 +/- 3.5°  
Slant -45 +/- 3.5°

**Output Polarization (Aperture side)**

Horizontal

**Phase Tracking, relative to stand.**

Over +/-40° AZ and +/-10° EL

2-6GHz Models  
6-18 GHz Models  
/+4° over 100%, +/-3° over 86% of band  
/+6° over 100%, +/-4° over 76% of band

**Amplitude Tracking, relative to stand.**

Over +/-40° AZ and +/-10° EL

2-6GHz Models  
6-18GHz Models  
.4dB max  
.4dB max for 80% of band, 1.0dB max for 100% of band

**Power Handling**

+34dBm up to 6 GHz max, +28dBm above 6 GHz max

### MECHANICAL

**Weight**

Varies by model and mounting configuration, Consult Factory

**Finish**

Chemical Film Per MIL-C-5541 for interface surfaces,  
White Epoxy all other surfaces

All data contained herein is subject to change without notice.  
For additional information E-mail: antenna.info@harris.com

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# Q156 Series

Polarizing Grids

## INCHES [MILLIMETERS]

### SPECIFICATIONS [PER RTCA DO-160C, EXCEPT WHERE NOTED]

<table>
<thead>
<tr>
<th>Environmental Factor</th>
<th>Section, Cat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature and Altitude</td>
<td>4, D2</td>
</tr>
<tr>
<td>Humidity</td>
<td>6, C</td>
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<tr>
<td>Random Vibration</td>
<td>8, Curve C</td>
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<tr>
<td>Mechanical Shock</td>
<td>7</td>
</tr>
<tr>
<td>Acceleration</td>
<td>6G Operating, 9G Structural</td>
</tr>
<tr>
<td>Salt Atmosphere</td>
<td>14, S</td>
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<tr>
<td>Sand And Dust</td>
<td>12, D</td>
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<tr>
<td>Fungus</td>
<td>13</td>
</tr>
</tbody>
</table>

Consult with factory for mounting specifications.

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