

## <u>Q156 SERIES</u> POLARIZING GRIDS

L3Harris' Q156 Series of polarizing grids enable the reception of almost all signal polarizations when fitted to standard horizontally 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 right-hand and left-hand circular polarizations. An epoxy fiberglass open-faced shell provides the necessary rigidity for flight applications without interfering with antenna reception patterns. The Q156 Series is designed for electronic support measures (ESM) and electronic warfare (EW) applications. The polarizing grids are suitable for a variety of airborne applications. They have a wide angle of view in the azimuth plane, a moderate angle of view in the elevation plane, and have been designed to provide repeatable, unit-to-unit phase tracking. Key features for each model within the series are described below:

## ELECTRICAL

Frequency range	-1, -2,-5, -6: 2-6 GHz -3, -4, -7: 6-18 GHz
Number of apertures covered	-2, -3, -5, -7: single -4, -6: triple -1: quad
Input polarization	-1 through -6: slant 45 +/- 3.5° -7: slant -45 +/- 3.5°
Output polarization (aperture side)	Horizontal
Phase tracking relative to standard	Over +/-40° AZ and +/-10° EL 2-6 GHz models: +/-4° over 100%, +/-3° over 86% of band 6-18 GHz models: +/-6° over 100%, +/-4° over 76% of band
Amplitude tracking relative to standard	Over +/-40° AZ and +/-10° EL 2-6 GHz models: 0.4 dB maximum 6-18 GHz models: 0.4 dB maximum for 80% of band, 1.0 dB maximum for 100% of band
Power handling	+34 dBm up to 6 GHz max, +28 dBm above 6 GHz maximum
MECHANICAL	
Weight	Varies by model and mounting configuration, consult factory
Finish	Chemical film per MIL-C-5541 for interface surfaces, white epoxy for all other surfaces



## **KEY FEATURES**

- > Lightweight construction
- > 2-6 and 6-18 gigahertz frequency band versions
- > Single polarizer can accommodate multiple apertures
- > Up to +34 decibel milliwatts power handling

For further details and specifications, contact the factory at antenna.info@L3Harris.com

## Q156 Series Polarizing Grids

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1025 W. NASA Boulevard Melbourne, FL 32919