

Q137 SERIES HORN ANTENNAS

L3Harris' Q137 Series of antennas are rectangular, dual-ridge horns designed for electronic support measures (ESM) and electronic warfare (EW) applications. They are suitable for a wide variety of applications in the 2-6 gigahertz band. The antenna elements have a wide angle of view in the azimuth plane and a moderate angle of view in the elevation plane. All units can be provided independently or as matched sets with the phase and amplitude tracking shown below. L3Harris can also provide the Q137 Series pre-assembled into interferometer arrays with customer specified spacing. In addition, the Q137 Series can be adapted for the reception of many polarizations with the addition of L3Harris model Q156 Series of polarizer grids. These lightweight, multilayer grids are specifically designed for interface with the Q137 Series and provide slant-45 polarization.

ELECTRICAL			
Antenna gain (dBi)	Frequency (GHz)		
	2	4	6
Peak	7.5	12	12.5
+/-40° AZ @ 0° EL	5.1	7.7	7.4
+/-40° EZ @ 0° AZ	5.1	7.7	9.0
Back-lobe, max (-dBc)	8	23	26
Polarization		Horizontal	
Phase tracking			
Within +/-40° AZ and +/-10° EL		10° peak-to-peak	
Within any 100 MHz		2° peak-to-peak	
Within 10° AZ		94% <2° peak-to-peak, 100% <3.5° peak- to-peak	
Within 5° EL		99% <2° peak-to-peak, 100% <2.8° peak- to-peak	
Polarization		2° peak-to-peak	
Relative to gold standard		+/- 6°	
VSWR, max		2.5:1 for 100%, 2.0:1 for 85%	
Amplitude tracking			
Within +/- 40° AZ and +/- 10° EL		2 dB peak-to-peak	
Within +/- 65° AZ and +/- 10° EL		4 dB peak-to-peak	
Gain at -90°÷65° and 65°÷90 AZ comparative to any antenna gain at 25° and -25° AZ for +/- 10° EL		5 dB min 4.3 dB min below 2.5 GHz	
Squint		2° max	
Power handling		+34 dBm up to 6 GHz, +28 dBm above 6 GHz	



KEY FEATURES

- > Designed for ESM/EW applications
- > Wide angle of view in the azimuth plane
- > Phase and amplitude tacking options avialable
- > Can be used in fixed site, ground or airborne

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

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