



**L3HARRIS™**  
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# Q175 SERIES SPIRAL ANTENNA

The Q175 Series of planar spirals have been designed to provide high-accuracy unit-to-unit phase and amplitude matching. They are ideal for use with amplitude direction-finding and interferometer systems. The Q175 Series are available in phase-matched sets and are factory tested for all unit-to-unit tracking requirements on a 100% basis. In addition to phase and amplitude repeatability, the Q175 Series provide low voltage standing wave ratio (VSWR) and axial ratio across the operating band.

The Q175 Series are available in a standard three-hole mount (model Q175-3) or pinned to a precision mounting bracket (model Q175-2) for direct installation in a customer supplied interferometer housing. The latter configuration provides improved unit-to-unit phase tracking for high-accuracy interferometer applications.

ELECTRICAL	
Frequency range	0.5-2.0 GHz
VSWR	2.5:1 max
Gain	0.5 GHz-12.5 dBil 1.0 GHz-3.0 dBil 1.5 GHz 0 dBil 2.0 GHz +1 dBil
Polarization	RHCP
Amplitude tracking	
Boresight	1 dB RMS
+/-45 degrees	1.5 dB RMS
Phase tracking	
Boresight	6 degrees RMS
+/-45 degrees	10 degrees RMS
Beamwidth (3dB)	80 degrees nom
Axial ratio	3 dB max at boresight (over 90% of band)
Power handling	Receive only
MECHANICAL	
Connector	SMA
Weight	1.8 lbs



## KEY FEATURES

- > Low VSWR across the operating band (0.5-2.0 gigahertz)
- > Phase-match and amplitude-tracking options are available
- > Multiple mounting configurations are available
- > Ideal for interferometer applications

For further details and specifications, contact the factory at [antenna.info@L3Harris.com](mailto:antenna.info@L3Harris.com)

### Q175 Series Spiral Antenna

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Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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