

Q71 SERIES COLLINEAR DIPOLE ARRAYS

The Q71 Series is a family of high-gain, collinear dipole arrays. Each of the products within the series is based on a vertical arrangement of four dipole antennas. They provide omnidirectional coverage in the azimuth plane with a narrow elevation beam that provides increased horizon gain levels.

The Q71-1-1 has been designed to support Joint Tactical Information Distribution System (JTIDS) requirements and is suitable for installation to a mast, shelter or other fixed site. The high-gain vertical dipole array provides maximum antenna gain at the horizon for line-of-sight communications.

The Q71-4-1 features an extended bandwidth (1,350 versus 1,206 megahertz), direct-strike lightning protection and a null-fill radiator. This null-fill radiator, in conjunction with revised element phasing, provides both a high-gain beam at the horizon and limited pattern coverage over the entire upper hemisphere. The Q71-4 includes a detachable lightning rod and is suitable for installation to a mast, shelter or other fixed site.

The Q71-6-1 uses the same antenna aperture as the -1 but has been redesigned to meet vehicular shock and impact requirements. The Q71-6-1 provides Link-16/JTIDS coverage and is suitable for vehicular applications.

ELECTRICAL			
	Q71-1-1	Q71-4-1	Q71-6-1
Frequency range	969 – 1,206 MHz	960 – 1,350 MHz	969 – 1,206 MHz
VSWR	2.0:1	2.0:1	2.0:1
Gain	7.5 dBi (±1 dB)	+3 dBi	7 dBi (±1 dB)
Impedance	50 ohms	50 ohms	50 ohms
Polarization	Vertical	Vertical	Vertical
Radiation patterns			
Azimuth	Omnidirectional	Omnidirectional	Omnidirectional
Elevation	3 dB beam width 15° to 18°	Beam peak at horizon null fill over hemisphere	3 dB beam width 15° to 18°
Power handling	500 watt CW, 1 kW peak	100 watt avg	250 watt CW
MECHANICAL			
Connector	N female	7/16 female	TNC female
Weight	10 lbs max	15 lbs	24 lbs
Finish	Olive drab green	Olive drab green	Olive drab green



KEY FEATURES

- > Suitable for installation for most ground applications
- > Extended bandwidth variants available
- > Meets vehicular shock and impact requirements
- > Supports JTIDS network

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

Q71 Series Collinear Dipole Arrays

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