



# CA-1140 SERIES UHF LOW-POWER MULTICHANNEL ANTENNAS

The CA-1140 Series is a family of lightweight, low-power dipole antennas for general purpose communications use in the 225-400-megahertz frequency band. The assemblies are intended for use where independent, broadband, multichannel operation is required. The series offers configurations with two to six channels.

Each member of the series is comprised of base-mounted, broadband dipole units mounted colinearly within a sealed epoxy fiberglass housing. The antenna size depends upon the number of signal channels desired. The minimum configuration is only 66 inches tall and provides two ultra-high frequency (UHF) channels. The maximum configuration is 220 inches tall and provides six independent channels. Each radiator is broadband and covers the entire 225-400-megahertz band without tuning. Each channel has a separate input and handles radio frequency (RF) powers to 50 watts with a voltage standing wave ratio (VSWR) on 50 ohms of less than 2.0:1. Pattern coverage is omnidirectional with maximum signal intensity along the horizon. The minimum isolation between channels is 30 decibels. Because of the inherent broadband characteristics and balanced electrical design, the CA-1140 Series antennas are insensitive to mounting location and surrounding environment.

CA-1140 Series antennas are designed to meet MIL-STD-167, type I vibration and the service conditions of MIL-STD-810B.

ELECTRICAL						
Frequency range	225–400 MHz					
VSWR	2.0:1 nom					
Gain	1.5 dB					
Impedance	50 ohms					
Polarization	Vertical					
Azimuth coverage	Omnidirectional within ±1 dB					
Zenith coverage	Figure-eight dipole pattern with maximum at horizon					
Polarization	Vertical					
RF isolation between channels	25 dB nom					
Power handling	50 W average, each channel					
MECHANICAL						
Input connectors (all models)	Type N receptacle, each channel					
Finish (all models)	White epoxy polyamide					
Type	No. of inputs	Height (in.)	Radome dia. (in.)	Base dia. (in.)	Weight (lbs)	Mounting (in.)
CA-1140-2	2	66	3.5	6.5	15	Four 0.562 bolts on 5.5 BC
CA-1140-3	3	104	3.5	6.5	20	Four 0.562 bolts on 5.5 BC
CA-1140-4	4	144	3.5	6.5	30	Four 0.562 bolts on 5.5 BC
CA-1140-5	5	182	5	13	45	Six 0.562 bolts on 11.75 BC
CA-1140-6	6	220	5	13	55	Six 0.562 bolts on 11.75 BC



## KEY FEATURES

- > Lightweight and durable design
- > To be used in applications where multichannel operation is required
- > Each channel has a separate input and handles up to 50 watts of power
- > Meets MIL-STD-167 and MIL-STD-810B

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

### CA-1140 Series UHF Low-power Multichannel Antennas

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