The CA-1140 Series is a family of lightweight, low-power dipole antennas for general purpose communications use in the 225 – 400 MHz frequency band. The assemblies are intended for use where independent, broadband, multichannel operation is required. The series offers configurations with 2 to 6 channels.

Each member of the series is comprised of base mounted, broadband dipole units mounted colinearly within a sealed epoxy fiberglass housing. Size depends upon the number of signal channels desired. The minimum configuration is only 66 inches tall and provides two UHF channels. The maximum configuration is 220 inches tall and provides six independent channels.

Each radiator is broadband and covers the entire 225 – 400 MHz band without tuning. Each channel has a separate input and handles RF powers to 50 watts with a 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 dB. 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.

**SPECIFICATIONS FOR: CA-1140 SERIES UHF LOW POWER MULTICHANNEL ANTENNAS**

### 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 watts average, each channel

### MECHANICAL

<table>
<thead>
<tr>
<th>Input Connectors (all models)</th>
<th>Type N receptacle, each channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish (all models)</td>
<td>White epoxy polyamide</td>
</tr>
<tr>
<td>No. of Inputs</td>
<td>CA-1140-2: 2</td>
</tr>
<tr>
<td>Height (in.)</td>
<td>66</td>
</tr>
<tr>
<td>Radome Dia. (in.)</td>
<td>3.5</td>
</tr>
<tr>
<td>Base Dia. (in.)</td>
<td>6.5</td>
</tr>
<tr>
<td>Weight (lbs)</td>
<td>15</td>
</tr>
<tr>
<td>Mounting (in.)</td>
<td>Four 0.562 bolts on 5.5 BC</td>
</tr>
</tbody>
</table>

All data contained herein is subject to change without notice. For additional information E-mail: antenna.info@harris.com

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CA-1140 Series UHF
Low Power Multichannel Antennas

INCHES [CENTIMETERS]

Consult with factory for mounting specifications.