The **20-7009 Four Element CRPA Antenna** is a miniature four element Global Positioning System (GPS) Controlled Reception Pattern Array (CRPA) antenna designed primarily for airborne rotary wing and ground-based operations.

The **20-7009** consists of four light-weight, temperature stable radiating elements which operate with nominally hemispherical coverage in the GPS L1 and L2 bands.

The array is available in a variety of options, including passive and active configurations. The active configuration contains four low-noise amplifiers protected by filters, providing rejection of unwanted out-of-band signals, and limiters which provide protection from high power signals.

The active CRPA is designed to work in conjunction with a compatible Chelton Digital Antenna Control Unit (DACU), which houses the anti-jam electronics functionality.

### Electrical Specification

- Meets the electrical requirements of TSO-C190 and MSO-C144 when operating in a benign (no jammer) environment.
- Frequency Ranges: GPS, L1, L2, P, M-Code
- LNA Gain: 28.0 dB (nominal)
- LNA Noise Figure: $\leq 3.0 \text{ dB} @ +23^\circ\text{C}$

### Environmental Specification

- MIL-STD-810G
- MIL-STD-461F
- MIL-STD-464A, Zone 1C

### Mechanical Specification

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
<th>114.3 x 114.3 x 43.5 (maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>0.5 (maximum)</td>
</tr>
<tr>
<td>Connectors</td>
<td>SMA Female (4 off)</td>
</tr>
<tr>
<td>Mounting Configuration</td>
<td>4 holes fixed location</td>
</tr>
</tbody>
</table>

For further information please contact:

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