A high gain, electronically steerable, phased-array antenna providing hemispherical coverage in a single, low-profile installation.

- Supports Inmarsat Swift 64, Aero-H and Aero-H+
- Exceeds Inmarsat performance specifications
- Field-proven reliability: MTBFs in excess of 100,000 hours
- Market leader with over 80% market share
- Top-mounted antenna with single Beam Steering Unit and Diplexer/LNA
- No coverage blind spots (keyholes)
- True top-mount design virtually eliminates multipath interference
- Conforms to ARINC 741 and Inmarsat SDM
- Only one RF interconnection, for easy installation
- Comprehensive Built-In Test (BIT) with easy to access, front diagnostic BSU port available to maintenance personnel
- Weight saving of 16 lb (7.3 kg) compared to standard CMA-2102

CMA-2102LW
Light Weight Version of the CMA-2102 Satcom High Gain Antenna System

Esterline
CMC Electronics
MONTREAL • OTTAWA • CHICAGO • www.cmcelectronics.ca
CMA-2102LW SATCOM HIGH GAIN ANTENNA SYSTEM - SPECIFICATIONS

**FREQUENCY**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive</td>
<td>1525.0 MHz to 1559.0 MHz</td>
</tr>
<tr>
<td>Transmit</td>
<td>1626.5 MHz to 1660.5 MHz</td>
</tr>
</tbody>
</table>

**SERVICE COVERAGE**

Seamless coverage, independent of aircraft direction over more than 90% of the specified Inmarsat hemisphere. No keyholes. Conforms to ARINC 741.

**GAIN**

Between 12 dBiC and 17 dBiC over 90% of the Inmarsat hemisphere. Minimum 9 dBiC over 100% of the Inmarsat hemisphere.

**POLARIZATION PERFORMANCE**

Right hand circular. Axial ratio is less than 6.0 dB for all steering angles and all frequencies of operation within coverage region.

**MULTIPATH REJECTION**

Exceeds 12.9 dB rejection at 5 degrees elevation.

**BEAM SWITCHING**

50 microseconds maximum.

**SATELLITE DISCRIMINATION (SIDELOBE SUPPRESSION)**

Exceeds 13 dB over coverage region.

**AERODYNAMICS**

The radome shape has been chosen to optimize aerodynamic performance. Equivalent fuel burn penalty: 0.04%.

**INSTALLATION**

Single top-mounted antenna requires only one 1" (25 mm) diameter access hole for RF and power/control cables. Easy connector access via removable panel. Single Beam Steering Unit can be located up to 100 ft. (30 m) remote.

**OPTIONS**

Adapter plates, connector kits and mounting racks available on request.

**UNIT CHARACTERISTICS**

<table>
<thead>
<tr>
<th></th>
<th>High Gain Antenna</th>
<th>Beam Steering Unit</th>
<th>Diplexer / LNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>67&quot; (170.2 cm)</td>
<td>2 MCU</td>
<td>11.05&quot; (28.1 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>18.5&quot; (47 cm)</td>
<td></td>
<td>7.76&quot; (19.7 cm)</td>
</tr>
<tr>
<td>Height</td>
<td>4.75&quot; (12.1 cm)</td>
<td></td>
<td>1.97&quot; (5 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>49.4 lb (22.4 kg)</td>
<td>6.0 lb (2.7 kg)</td>
<td>6.5 lb (3.0 kg)</td>
</tr>
<tr>
<td>Form Factor</td>
<td></td>
<td></td>
<td>ARINC 741 compliant</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>45 Watts maximum</td>
<td>12 Watts maximum</td>
<td>12 Watts maximum</td>
</tr>
</tbody>
</table>

For information purposes only. To accommodate product improvements, specifications are subject to change without notice.

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