



FAA Approved Facility

**RHCP/LHCP L1/L2 GPS Antenna, P/N: 2.3G1215P2-20SSMCB-3 Rev A**  
**Dual Linear (V/H) L1/L2 GPS Antenna, P/N: 2.3G1215P2L-20SSMCB-3 Rev A**  
**Low Profile (2.15x2.07x0.37)in, Flat/Front Mount Configuration**

Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: [antennas@antcom.com](mailto:antennas@antcom.com) . <http://www.antcom.com>

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<p><b>NOTICE OF PROPRIETARY RIGHTS</b>          THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY CONDITIONED UPON YOUR AGREEMENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY (AND DOES NOT INCLUDE MANUFACTURE OR PROCESSING USES). ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.</p>		<p style="text-align: center;"><b>SPECIFICATIONS</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"></th> <th colspan="6">REVISIONS</th> </tr> <tr> <th>ZONE</th> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPROVED</th> <th colspan="2"></th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="8"> <p><b>ELECTRICAL:</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th colspan="3">L1: (1575.42 ±12) MHz</th> <th colspan="3">L2: (1227.60 ±12) MHz</th> </tr> </thead> <tbody> <tr> <td>FREQUENCY:</td> <td colspan="6"></td> </tr> <tr> <td>RADIATION PATTERN:</td> <td colspan="6" style="text-align: center;">HEMISPHERICAL</td> </tr> <tr> <td>POLARIZATION:</td> <td colspan="6" style="text-align: center;">RHCP/LHCP</td> </tr> <tr> <td>VSWR:</td> <td colspan="3" style="text-align: center;">&lt; 2.0:1</td> <td colspan="3" style="text-align: center;">&lt; 2.0:1</td> </tr> <tr> <td>IMPEDANCE:</td> <td colspan="3" style="text-align: center;">50 ohms</td> <td colspan="3" style="text-align: center;">50 ohms</td> </tr> <tr> <td>ANTENNA GAIN (dBic):</td> <td>Free Space</td> <td>3 in G.P.</td> <td>4 ft G.P.</td> <td>Free Space</td> <td>3 in G.P.</td> <td>4 ft G.P.</td> </tr> <tr> <td>@ 90 ° (ZENITH):</td> <td>+2.7</td> <td>+4.7</td> <td>+3.1</td> <td>+1.5</td> <td>+3.3</td> <td>+4.5</td> </tr> <tr> <td>@ 10 ° Elevation:</td> <td>-4.4</td> <td>-1.8</td> <td>-1.9</td> <td>-6.7</td> <td>-3.8</td> <td>-3.5</td> </tr> <tr> <td>@ 20 ° Elevation:</td> <td>-2.3</td> <td>-0.3</td> <td>+0.6</td> <td>-5.6</td> <td>-2.0</td> <td>-0.8</td> </tr> <tr> <td>@ 30 ° Elevation:</td> <td>-0.8</td> <td>+1.4</td> <td>+1.7</td> <td>-4.5</td> <td>-0.5</td> <td>+1.4</td> </tr> <tr> <td>@ 60 - 90 ° Elevation:</td> <td>&gt; 2.0</td> <td>&gt; 3.9</td> <td>&gt; 2.4</td> <td>&gt; 0.0</td> <td>&gt; 2.7</td> <td>&gt; 2.2</td> </tr> <tr> <td>BEAM WIDTH (3dB):</td> <td>113 Deg.</td> <td>114 Deg.</td> <td>143 Deg.</td> <td>85 Deg.</td> <td>106 Deg.</td> <td>74 Deg.</td> </tr> <tr> <td>AXIAL RATIO:</td> <td colspan="3" style="text-align: center;">2 dB</td> <td colspan="3" style="text-align: center;">2 dB</td> </tr> <tr> <td>LIGHTNING PROTECTION:</td> <td colspan="6" style="text-align: center;">DC GROUNDING</td> </tr> </tbody> </table> </td> <td></td> <td></td> </tr> </tbody> </table>					REVISIONS						ZONE	REV	DESCRIPTION	DATE	APPROVED				<p><b>ELECTRICAL:</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th colspan="3">L1: (1575.42 ±12) MHz</th> <th colspan="3">L2: (1227.60 ±12) MHz</th> </tr> </thead> <tbody> <tr> <td>FREQUENCY:</td> <td colspan="6"></td> </tr> <tr> <td>RADIATION PATTERN:</td> <td colspan="6" style="text-align: center;">HEMISPHERICAL</td> </tr> <tr> <td>POLARIZATION:</td> <td colspan="6" style="text-align: center;">RHCP/LHCP</td> </tr> <tr> <td>VSWR:</td> <td colspan="3" style="text-align: center;">&lt; 2.0:1</td> <td colspan="3" style="text-align: center;">&lt; 2.0:1</td> </tr> <tr> <td>IMPEDANCE:</td> <td colspan="3" style="text-align: center;">50 ohms</td> <td colspan="3" style="text-align: center;">50 ohms</td> </tr> <tr> <td>ANTENNA GAIN (dBic):</td> <td>Free Space</td> <td>3 in G.P.</td> <td>4 ft G.P.</td> <td>Free Space</td> <td>3 in G.P.</td> <td>4 ft G.P.</td> </tr> <tr> <td>@ 90 ° (ZENITH):</td> <td>+2.7</td> <td>+4.7</td> <td>+3.1</td> <td>+1.5</td> <td>+3.3</td> <td>+4.5</td> </tr> <tr> <td>@ 10 ° Elevation:</td> <td>-4.4</td> <td>-1.8</td> <td>-1.9</td> <td>-6.7</td> <td>-3.8</td> <td>-3.5</td> </tr> <tr> <td>@ 20 ° Elevation:</td> <td>-2.3</td> <td>-0.3</td> <td>+0.6</td> <td>-5.6</td> <td>-2.0</td> <td>-0.8</td> </tr> <tr> <td>@ 30 ° Elevation:</td> <td>-0.8</td> <td>+1.4</td> <td>+1.7</td> <td>-4.5</td> <td>-0.5</td> <td>+1.4</td> </tr> <tr> <td>@ 60 - 90 ° Elevation:</td> <td>&gt; 2.0</td> <td>&gt; 3.9</td> <td>&gt; 2.4</td> <td>&gt; 0.0</td> <td>&gt; 2.7</td> <td>&gt; 2.2</td> </tr> <tr> <td>BEAM WIDTH (3dB):</td> <td>113 Deg.</td> <td>114 Deg.</td> <td>143 Deg.</td> <td>85 Deg.</td> <td>106 Deg.</td> <td>74 Deg.</td> </tr> <tr> <td>AXIAL RATIO:</td> <td colspan="3" style="text-align: center;">2 dB</td> <td colspan="3" style="text-align: center;">2 dB</td> </tr> <tr> <td>LIGHTNING PROTECTION:</td> <td colspan="6" style="text-align: center;">DC GROUNDING</td> </tr> </tbody> </table>									L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz			FREQUENCY:							RADIATION PATTERN:	HEMISPHERICAL						POLARIZATION:	RHCP/LHCP						VSWR:	< 2.0:1			< 2.0:1			IMPEDANCE:	50 ohms			50 ohms			ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	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		<p><b>MECHANICAL:</b></p> <p>SIZE: 2.31 in. [58.56 mm] SQ.          HEIGHT: 0.37 in. [9.35 mm]          WEIGHT: 2.8 oz. (80 g)          FINISH: SKYDROLRESISTANTPOLYURETHANENAMEL BASE IRIDITE PER MIL-C-5441          MATERIAL: 6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE          CONNECTOR: P1: RHCP with 20 in (500mm) SSMC MALE CABLES          P2: LHCP with 20 in (500mm) SSMB MALE CABLES</p>																																																																																																																																								
		<p><b>ENVIRONMENTAL:</b></p> <p>TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]          ALTITUDE: 70,000 ft.          VIBRATION: &gt;30 G's          LEAKAGE: HERMETICALLY SEAL</p>																																																																																																																																								
<p><b>FEDERAL &amp; MILITARY SPECIFICATIONS</b></p> <p>DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, AND MIL-STD-810</p>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>1</th> <th>DESCRIPTION</th> <th>PART NO</th> <th>SPECIFICATION</th> <th>MATERIAL</th> <th>FINISH</th> <th>ITEM NO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TOLERANCES ARE: DECIMALS ANGLES ± 1/64 .XX ± .020 ± 1° .XXX ± .010</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>TOLERANCE SYM PER ANSI Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILE TO R .030 SCREW THREADS PER MIL-S-8879 MACHINED SURFACES 125</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>DO NOT SCALE DRAWING</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO	1	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TOLERANCES ARE: DECIMALS ANGLES ± 1/64 .XX ± .020 ± 1° .XXX ± .010							TOLERANCE SYM PER ANSI Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILE TO R .030 SCREW THREADS PER MIL-S-8879 MACHINED SURFACES 125							DO NOT SCALE DRAWING																																																																																																															
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