42G1215AF-XX-X ANTENNA FAMILY
ARINC Footprint GPS L1/L2 Antenna with Enhanced Out-of-Band Rejection

This interference rejecting antenna features high out-of-band filtering near the Global Positioning System (GPS) L1 frequency band for assured GPS reception in high interference environments.

The 42G1215AF-XX-X product is a dual-band GPS L1/L2 antenna. The baseplate is compatible with ARINC 743 mounting hole and footprint requirements. An O-ring seal between the antenna and your platform ensures easy installation.

Antcom can customize this product family to meet your specific requirements. Please contact us for more information about customization options.

**BENEFITS**

- Sharp out-of-band signal rejection for assured GPS
- Compatible with standard GPS receivers
- Standard ARINC mounting footprint for easy platform integration

**FEATURES**

- High GPS L1 band filtering for rejecting out-of-band interference
- GPS L1/L2 with M-Code support
- ARINC 743 compatible mounting holes and footprint
- DC power input through RF connector
- Connector options available
- Paint color options available

**OPTIONS**

**COLOR**
- Gloss White
- Lusterless Gray
- Camo Green
- Lusterless Black
- Desert Tan

**CONNECTOR**
- SMA
- BNC
- MCX
- MMCX
- Type N
- N-Bulkhead
- TNC
- TNC-Bulkhead

**LNA GAIN**
- 33dB High Filtering

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**ELECTRICAL**

**Frequency Range:**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Out-of-Band Rejection</th>
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<tbody>
<tr>
<td>1526 to 1536 MHz</td>
<td>&gt; 50 dB</td>
</tr>
<tr>
<td>1627.5 to 1627.5 MHz (L1 GPS)</td>
<td>&gt; 70 dB</td>
</tr>
<tr>
<td>1646.5 to 1656.5 MHz (L2 GPS)</td>
<td>&gt; 25 dB above 1610 MHz</td>
</tr>
<tr>
<td>1610 to 1626.5 MHz</td>
<td>&gt; 45 dB above 1613 MHz</td>
</tr>
</tbody>
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**VSWR** <2.0:1

**Impedance** 50 ohms

**Polarization** RHCP

**MECHANICAL & ENVIRONMENTAL**

Designed to:

- **Weight**: 6.8 oz Typical
- **Temperature**: -55°C TO +85°C
- **Altitude**: 70,000 ft
- **Vibration**: > 30 Grms

**TYPICAL LNA PERFORMANCE**

<table>
<thead>
<tr>
<th>Performance Parameter</th>
<th>Specification</th>
</tr>
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<tbody>
<tr>
<td>LNA Gain</td>
<td>See Options Table</td>
</tr>
<tr>
<td>LNA Noise Figure</td>
<td>3.5 dB</td>
</tr>
<tr>
<td>LNA P1dB Out</td>
<td>+13 dBm</td>
</tr>
<tr>
<td>LNA DC Power</td>
<td>(3.8 - 15) V</td>
</tr>
<tr>
<td></td>
<td>&lt;70 mA</td>
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**LIMITING & FILTERING**

<table>
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<th>Performance Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Power Handling</td>
<td>1 Watt CW</td>
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**PART NUMBER DECODER**

42G1215AF-XX-X

- **Color** (PER AMS-STD-595)
  1 = Gloss White #17925
  2 = Lusterless Gray #36320
  3 = Camo Green #34094
  4 = Lusterless Black #37038
  5 = Desert Tan #33446

- **Connector**
  S = SMA
  M = MCX; MM = MMCX
  N = Type N, NB = N-Bulkhead
  T = TNC, TB = TNC-Bulkhead