42G1215X-XX-X ANTENNA FAMILY
ARINC Footprint GPS L1/L2 Antenna

The 42G1215X-XX-X is a dual-band GPS L1/L2 antenna family. The baseplate is designed to be compatible with ARINC 743 mounting hole and footprint requirements. An O-ring seal between the antenna and your platform ensures easy installation.

The product family is available in passive and active (amplified) configurations. The active configurations offer 2-stage integrated bandpass filtering for high out-of-band rejection, and limiter diodes to protect sensitive receiver electronics. The passive configurations are best suited to applications where the antenna is located close to the GNSS receiver and offers the lowest insertion loss to minimize the noise figure of your system.

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

**BENEFITS**
- Rugged GPS L1/L2 antenna
- Standard ARINC mounting footprint for easy platform integration

**FEATURES**
- GPS L1/L2 with M-Code support
- ARINC 743 compatible mounting holes and footprint
- Passive or active (amplified) configurations available
- 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**
- S: SMA; B: BNC
- M: MCX; MM: MMCX
- N: N: NB:N-Bulkhead
- T, TNC: TB:
  - TNC-Bulkhead

**LNA GAIN**
- With 33 dB LNA
- With 20 dB LNA
- With 40 dB LNA
- Passive

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## ELECTRICAL

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>L1 GPS 1575.42 ± 12 MHz</td>
</tr>
<tr>
<td></td>
<td>L2 GPS 1227.60 ± 12 MHz</td>
</tr>
<tr>
<td>VSWR</td>
<td>&lt;2.0:1</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 ohms</td>
</tr>
<tr>
<td>Polarization</td>
<td>RHCP</td>
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</table>

## MECHANICAL & ENVIRONMENTAL

Designed to:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Weight</td>
<td>6.8 oz</td>
</tr>
<tr>
<td>Temperature</td>
<td>-55°C TO +85°C</td>
</tr>
<tr>
<td>Altitude</td>
<td>70,000 ft</td>
</tr>
<tr>
<td>Vibration</td>
<td>&gt; 30 Grms</td>
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</table>

## TYPICAL LNA PERFORMANCE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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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, &lt;70 mA</td>
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</tbody>
</table>

## LIMITING & FILTERING

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Power Handling</td>
<td>1 Watt CW</td>
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</tbody>
</table>

## PART NUMBER DECODER

42G1215X-XX-X

**LNA Gain**

- A = With 33 dB
- A2 = With 20 dB
- A4 = With 40 dB
- P = Passive

**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; B: SNC
- M = MCO; MM: MMCX
- N = N: NB: N-Bulkhead
- T = TNC, TB: TNC-Bulkhead

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VERSION - SEPTEMBER 2020