1G1215X-XXC-X ANTENNA FAMILY
1G Form Factor GPS L1/L2 Antenna with Centered Connector

The 1G1215X-XXC-X is tuned for Global Positioning System (GPS) signal reception in the L1 and L2 frequency bands. This "1G" form factor allows bottom mount installation using four 4-40 UNF screws. The connector is on the center of the baseplate bottom for installations desiring minimal mounting hole sizes on the platform.

The product family is available in passive and active (amplified) configurations. The active configurations include two-stage ceramic and surface acoustic wave (SAW) filtering for sharp band edges and linearity within the GPS bands. The upper and lower frequency bands are separately amplified and filtered to ensure operation in high ambient interference environments. The passive configurations are best suited to applications where the antenna is positioned close to the GPS receiver.

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

BENEFITS

• Military-grade GPS L1/L2 reception
• High-performance antenna in a lightweight, small form factor enclosure

FEATURES

• GPS L1/L2 with M-Code support
• 1G product footprint
• Connector centered on baseplate
• Passive or active (amplified) configurations available

OPTIONS

COLOR
• Gloss White
• Lusterless Gray
• Camo Green
• Unpainted Black
• Desert Tan

CONNECTOR
• SMA
• MCX
• MMCX
• Type N
• TNC

LNA GAIN
• With 20 dB LNA
• With 33 dB LNA
• With 40 dB LNA
• Without LNA

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**ELECTRICAL**

<table>
<thead>
<tr>
<th>Frequency Range:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>L1 GPS</td>
<td>1575.42 ± 12 MHz</td>
</tr>
<tr>
<td>L2 GPS</td>
<td>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>
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<tr>
<td>Polarization</td>
<td>RHCP</td>
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**MECHANICAL & ENVIRONMENTAL**

<table>
<thead>
<tr>
<th>Designed to:</th>
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<tbody>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Temperature</td>
</tr>
<tr>
<td>Altitude</td>
</tr>
<tr>
<td>Vibration</td>
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</tbody>
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**TYPICAL LNA PERFORMANCE**

<table>
<thead>
<tr>
<th>LNA Gain</th>
<th>See Options Table</th>
</tr>
</thead>
<tbody>
<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>
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<thead>
<tr>
<th>Power Handling</th>
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<tbody>
<tr>
<td>1 Watt CW</td>
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</table>

**PART NUMBER DECODER**

1G1215X-XXC-X

- **LNA Gain**
  - A = With 33 dB
  - A2 = With 20 dB
  - A4 = With 40 dB
  - P = Without LNA

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

- **Connector**
  - RS = R-SMA; S: SMA
  - M = MCX; MM: MMCX
  - N = N; NB: N-Bulkhead
  - T = TNC; TB: TNC-Bulkhead

- **Cable Length**
  - X = No Cable
  - # = Cable Length (in)