1G Form Factor GPS L1/L2 Antenna

The 1G1215X-XX-X is tuned for Global Positioning System (GPS) signal reception in the L1 and L2 frequency bands. This antenna is packaged in our "1G" form factor enclosure for bottom mount installation using four 4-40 UNF screws.

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
- 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 33 dB LNA
- With 20 dB LNA
- With 40 dB LNA
- Without LNA

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ELECTRICAL

Frequency Range:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>L1 GPS</td>
<td>1575.42 ± 12 MHz</td>
<td></td>
</tr>
<tr>
<td>L2 GPS</td>
<td>1227.60 ± 12 MHz</td>
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VSWR <2.0:1

Impedance 50 ohms

Polarization RHCP

MECHANICAL & ENVIRONMENTAL

Designed to:

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<tr>
<th></th>
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<tbody>
<tr>
<td>Weight</td>
<td>2.86 oz (Typical)</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>-55°C TO +85°C</td>
<td></td>
</tr>
<tr>
<td>Altitude</td>
<td>70,000 ft</td>
<td></td>
</tr>
<tr>
<td>Vibration</td>
<td>&gt; 30 Grms</td>
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TYPICAL LNA PERFORMANCE

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<tbody>
<tr>
<td>LNA Gain</td>
<td>See Options Table</td>
<td></td>
</tr>
<tr>
<td>LNA DC Power</td>
<td>(3.8 - 15) V</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;70 mA</td>
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LIMITING & FILTERING

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<tbody>
<tr>
<td>Power Handling</td>
<td>1 Watt CW</td>
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PART NUMBER DECODER

1G1215X-XX-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 = Type N; NB = N-Bulkhead
T = TNC; TB = TNC-Bulkhead

Cable Length

X = No Cable
# = Cable Length (IN)