1G1215X-XSMP-X-DS ANTENNA FAMILY

1G Form Factor GPS L1/L2 Antenna with Double-Shielded SMP Cable

The 1G1215X-XSMP-X-DS is tuned for Global Positioning System (GPS) signal reception in the L1 and L2 frequency bands. This antenna is designed in our "1G" form factor for bottom mount installation using four 4-40 UNF screws. A double-shielded SMP cable assembly is included for high isolation of RF signal outputs from the surrounding environment. The length of the cable assembly is customizable for your specific application.

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 GNSS 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 GNSS 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 form factor
- Includes double-shielded cable assembly terminated in SMP connector

**OPTIONS**

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

**LNA GAIN**
- With 33 dB LNA
- With 20 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>
</tr>
<tr>
<td>Polarization</td>
<td>RHCP</td>
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</tbody>
</table>

**MECHANICAL & ENVIRONMENTAL**

Designed to:

<table>
<thead>
<tr>
<th>Weight</th>
<th>2.85 oz (Typical)</th>
</tr>
</thead>
<tbody>
<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>
</tr>
</tbody>
</table>

**TYPICAL LNA PERFORMANCE**

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

**LIMITING & FILTERING**

| Power Handling     | 1 Watt CW          |

**PART NUMBER DECODER**

1G1215X-XSMP-X-DS

**Color (PER FED-STD-595B)**

1 = Gloss White #17925
2 = Lusterless Gray #36320
3 = Camo Green #34094
3O = Olive Drab Green #34088
4 = Lusterless Black #37038
5 = Desert Tan #33446

**Cable Length**

X = Cable Length (in)