G5ANT-3XXX ANTENNA FAMILY
Penta-Band GNSS FRPA

The G5Ant-3XXX product family is a small-footprint, multi-frequency antenna that provides assured Global Navigation Satellite Signal (GNSS) signal reception. The Antcom “G5” antenna operates in five frequency bands and includes support for GLONASS L1, GPS L1, L-Band, L2 GLONASS and L2 GPS. These antennas include the standard “Fixed Reception Pattern Antenna” (FRPA) mounting footprint for easy integration onto new and existing platforms. The rugged enclosure can withstand harsh environmental conditions seen in military, aerospace and other applications.

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**

- Standard FRPA mounting footprint for easy platform integration
- Many standard options available, and customizable if required

**FEATURES**

- Multi-frequency, multi-constellation for assured GNSS reception
- FRPA footprint with thru-hole mount or bottom-mount
- Passive or active (amplified) configurations available
- Active configurations offer 2-stage integrated bandpass filtering with diode limiters
- 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
- TNC

**LNA GAIN**
- With 33 dB LNA
- With 40 dB LNA
- Without LNA (Passive)

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ELECTRICAL

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L2 GPS</td>
<td>1227.60 ± 12 MHz</td>
</tr>
<tr>
<td>L2 GLONASS</td>
<td>1242 -1249 MHz</td>
</tr>
<tr>
<td>L-Band</td>
<td>1545 -1610 MHz</td>
</tr>
<tr>
<td>B1 BeiDou</td>
<td>1561.098 ± 10 MHz</td>
</tr>
<tr>
<td>L1 GPS</td>
<td>1575.42 ± 15.0 MHz</td>
</tr>
<tr>
<td>E1 GALILEO</td>
<td>1575.42 ± 17.0 MHz</td>
</tr>
<tr>
<td>L1 GLONASS</td>
<td>1609 ± 7.0 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>
</tr>
</tbody>
</table>

MECHANICAL & ENVIRONMENTAL

Designed to:

- Weight: 9.3 oz Typical
- Temperature: -55°C to +85°C
- Altitude: 70,000 ft
- Vibration: > 30 Grms

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 &lt;70 mA</td>
</tr>
</tbody>
</table>

LIMITING & FILTERING

| Power Handling            | 1 Watt CW           |

PART NUMBER DECODER

G5Ant-3XXX

- LNA Gain
  - A = With 33 dB
  - A4=With 40 dB
  - P = Without LNA (Passive)

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

- 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