



## 123GM1215X-XX-X ANTENNA FAMILY

### GPS L1/L2 Choke Ring Antenna

The 123GM1215X-XX-X is a dual-band GPS L1/L2 choke ring antenna that provides precise position and timing. The antenna design includes three concentric choke rings for reduced multipath at the horizon. The choke rings improve the radiation pattern group delay consistency for satellites at all sky angles, leading to enhanced GPS accuracy.

This antenna enclosure is optimal for applications where a fixed installation is required. The enclosure baseplate includes drainage holes, enabling the escape of moisture build-up from within the unit. The antenna element and its optional amplifier are fully sealed within the enclosure.

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
- Improved precision of positioning and timing versus typical GPS antennas
- Pole-mount for easy setup and installation

#### FEATURES

- GPS L1/L2 with M-Code support
- Choke ring design for multipath signal rejection
- Passive or active (amplified) configurations available
- DC power input through RF connector
- Connector options available
- Paint color options available



#### OPTIONS

COLOR	<ul style="list-style-type: none"><li>• Gloss White</li><li>• Lusterless Gray</li><li>• Camo Green</li><li>• Lusterless Black</li></ul>
CONNECTOR	<ul style="list-style-type: none"><li>• S: SMA</li><li>• M: MCX; MM: MMCX</li><li>• N: N; NB:N-Bulkhead</li><li>• T, TB: TNC, TNC-Bulkhead</li></ul>
LNA GAIN	<ul style="list-style-type: none"><li>• With 33 dB LNA</li><li>• With 20 dB LNA</li><li>• With 40 dB LNA</li><li>• Without LNA</li></ul>

**ELECTRICAL**

<b>Frequency Range:</b>	
<b>L1 GPS</b>	1575.42 ± 12 MHz
<b>L2 GPS</b>	1227.60 ± 12 MHz
<b>VSWR</b>	<2.0:1
<b>Impedance</b>	50 ohms
<b>Polarization</b>	RHCP

**MECHANICAL & ENVIRONMENTAL**

Designed to:

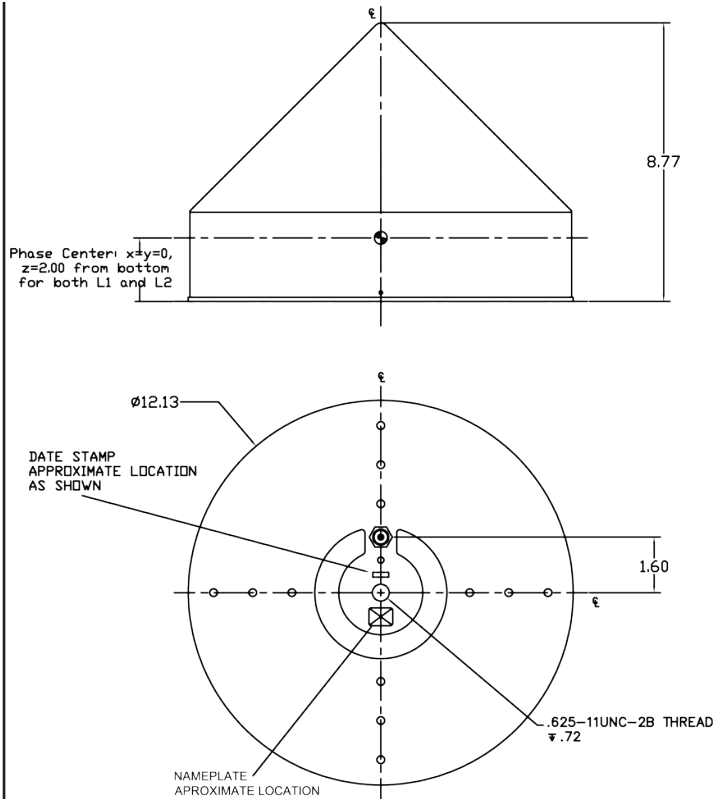
<b>Weight</b>	135.8 oz
<b>Temperature</b>	-55°C TO +85°C
<b>Altitude</b>	70,000 ft
<b>Vibration</b>	> 30 Grms

**TYPICAL LNA PERFORMANCE**

<b>LNA Gain</b>	See Options Table
<b>LNA Noise Figure</b>	3.5 dB
<b>LNA P1dB Out</b>	+13 dBm
<b>LNA DC Power</b>	(3.8 - 15) V <70 mA

**LIMITING & FILTERING**

<b>Power Handling</b>	1 Watt CW
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**PART NUMBER DECODER**

123GM1215X-XX-X

- LNA Gain**
  - A = With 33 dB
  - A2 = With 20 dB
  - A4 = With 40 dB
  - P = Without Passive
- Color (PER AMS-STD-595)**
  - 1 = Gloss White #17925
  - 2 = Lusterless Gray #36320
  - 3 = Camo Green #34094
  - 4 = Lusterless Black #37038
- Connector**
  - S = SMA
  - M = MCX; MM: MMCX
  - N = N; NB: N-Bulkhead
  - T = TNC; TB: TNC-Bulkhead

**CONTACT ANTCOM**

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