



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

ELECTRICAL

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

MECHANICAL & ENVIRONMENTAL

Designed to:

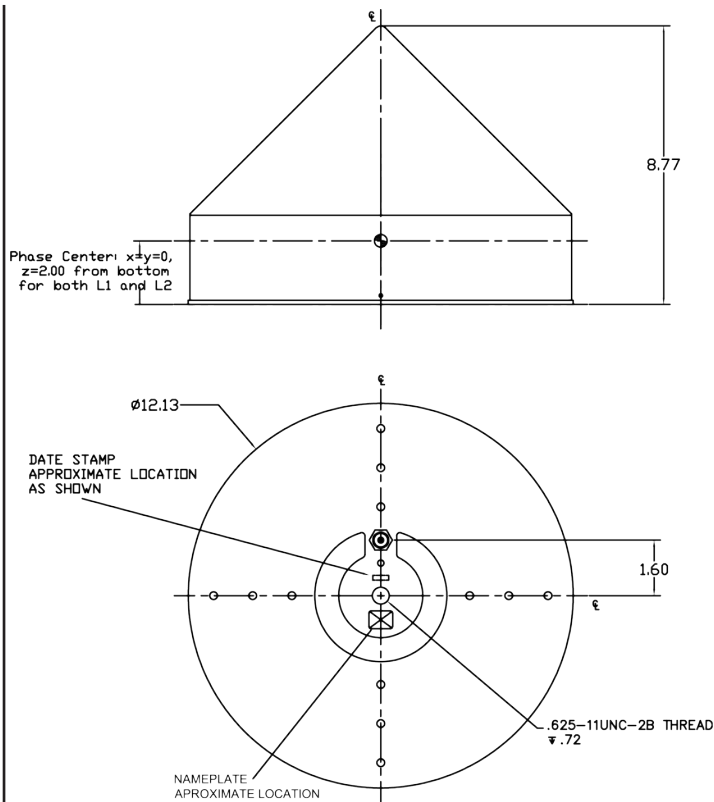
Weight	135.8 oz
Temperature	-55°C TO +85°C
Altitude	70,000 ft
Vibration	> 30 Grms

TYPICAL LNA PERFORMANCE

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

LIMITING & FILTERING

Power Handling	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 NavtechGPS for product details. www.NavtechGPS.com
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