



## 1.2G-MINI-GNSSX-XX-X SERIES ANTENNA

### Ultra Lightweight Antenna for Multi-Frequency GNSS Reception

The 1.2G-Mini-GNSSX-XX-X is an ultra lightweight circularly polarized antenna for applications demanding a miniature solution. This multi-band, multi-frequency antenna offers Global Navigation Satellite System (GNSS) coverage in the GPS, GLONASS, Galileo and Beidou bands. For best performance, the 1.2G Mini GNSS antenna should be mounted to a metal ground plane to enhance its low frequency reception.

The 1.2G Mini GNSS antenna is available in passive and active (amplified) configurations. The active circuitry is designed to support a wide range of input voltages with ultra low current consumption for long battery life and low fuel consumption. The amplifier design includes dual-stage filtering for excellent performance, even with nearby interference sources. The passive design is ideal for installations where the antenna is located close to the receiver and eliminates any need to power the antenna.

#### BENEFITS

- Rugged yet lightweight at only 1.42 oz (40 grams) for easier portability and longer airborne time on station
- Low power consumption with only 25 mA current draw and a wide input voltage compatibility range
- Multi-frequency GNSS capable including GPS M-Code & P(Y) signals and Galileo with PRS for high accuracy positioning, navigation and timing

#### FEATURES

- Easy installation via two (2) thru mount holes
- Single connector for antenna output and DC power input



#### OPTIONS

RADOME COLOR	<ul style="list-style-type: none"><li>• Gloss White</li><li>• Lusterless Gray</li><li>• Olive Drab Green</li><li>• Lusterless Black</li><li>• Desert Tan</li></ul>
CONNECTOR (FEMALE)	<ul style="list-style-type: none"><li>• SMA</li></ul>
LNA GAIN	<ul style="list-style-type: none"><li>• 28 dB LNA</li><li>• 15 dB LNA</li><li>• Passive</li></ul>

**ELECTRICAL**

<b>Signal Support</b>	
<b>GPS</b>	L1, L2, L5 C/A, P(Y), M-Code
<b>Galileo</b>	E1, E5a, E5b PRS
<b>GLONASS</b>	L1, L2
<b>Beidou</b>	B1, B2, B2a, B2b
<b>NAVIC</b>	L5
<b>L-Band Correction</b>	
<b>Passbands</b>	
<b>Upper passband</b>	1539 to 1610 MHz
<b>Lower passband</b>	1164 to 1252 MHz
<b>VSWR</b>	< 2.0:1
<b>Impedance</b>	50 ohms
<b>Polarization</b>	RHCP

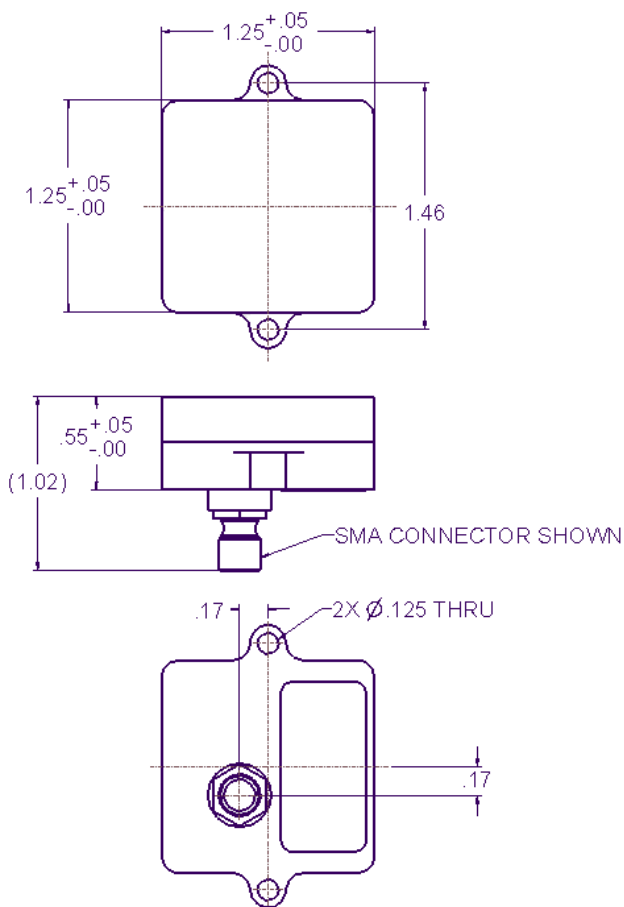
**MECHANICAL & ENVIRONMENTAL**

Designed to:

<b>Weight (typical)</b>	1.42 oz (40 g)
<b>Temperature</b>	-55°C to +85°C
<b>Altitude</b>	40,000 ft
<b>Random Vibration</b>	20 Grms

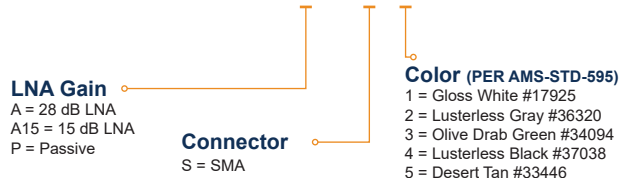
**TYPICAL LNA PERFORMANCE**

<b>LNA Gain</b>	
<b>A option</b>	28 dB ± 3 dB
<b>A15 option</b>	15 dB ± 3 dB
<b>P option</b>	Passive
<b>LNA Noise Figure</b>	3.5 dB
<b>LNA P1dB Out</b>	+11 dBm
<b>Input Power</b>	+2.7 to +15.0 VDC 25 mA
<b>Power Handling</b>	1 Watt CW
<b>Group Delay Ripple</b>	< 8 ns
<b>Differential Propagation Delay</b>	< 3 ns



**PART NUMBER DECODER**

**1.2G-Mini-GNSSX-XX-X**



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