



## 4G-MINI-GNSSX-XX-X SERIES ANTENNA

### Miniature Antenna for Multi-Frequency GNSS Reception

The 4G-Mini-GNSSX-XX-X is a compact circularly polarized antenna solution for installation on unmanned aerial vehicles, manned airborne platforms, military ground vehicles and other applications demanding high performance GNSS reception. The enclosure is modeled after the standard "ARINC 743" footprint, but resized in a smaller format for size and weight reduction.

The 4G Mini GNSS antenna is available in passive and active (amplified) configurations. The active circuitry is designed for high performance with low power consumption. The amplifier includes two stage filtering for mitigating interference signals from other nearby antennas, ideal for small platforms.

The passive design is best suited for installations where the antenna is located close to the receiver. This configuration eliminates any need to power the antenna.



#### BENEFITS

- Low power consumption with only 25 mA current draw and a wide input voltage compatibility range
- Ultra lightweight design at only 3.6 oz (103 g) with top mount installation design for ease of integration
- Coverage includes GPS M-Code & P(Y) signals and Galileo with PRS for high accuracy positioning, navigation and timing

#### FEATURES

- Top mount installation
- 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><li>• TNC</li><li>• Type N</li><li>• TNC Bulkhead</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

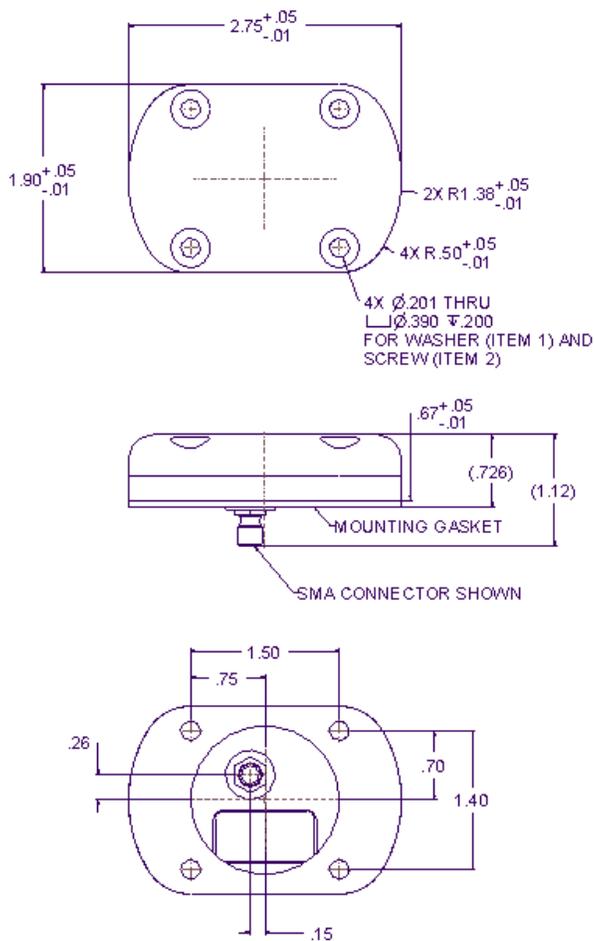
**MECHANICAL & ENVIRONMENTAL**

Designed to:

<b>Weight (typical)</b>	3.6 oz (103 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 W
<b>Group Delay Ripple</b>	< 8 ns
<b>Differential Propagation Delay</b>	< 3 ns



**PART NUMBER DECODER**

**4G-Mini-GNSSX-XX-X**

**LNA Gain**  
A = 28 dB LNA  
A15 = 15 dB LNA  
P = Passive

**Connector**  
S = SMA  
T = TNC  
N = Type N  
TB = TNC Bulkhead

**Color (PER AMS-STD-595)**  
1 = Gloss White #17925  
2 = Lusterless Gray #36320  
3 = Olive Drab Green #34094  
4 = Lusterless Black #37038  
5 = Desert Tan #33446

**CONTACT ANTCOM**

Phone: +1-310-782-1076  
Fax: +1-310-782-1086  
Email: sales.ant.ap@antcom.com  
Web: antcom.com

