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

ELECTRICAL

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

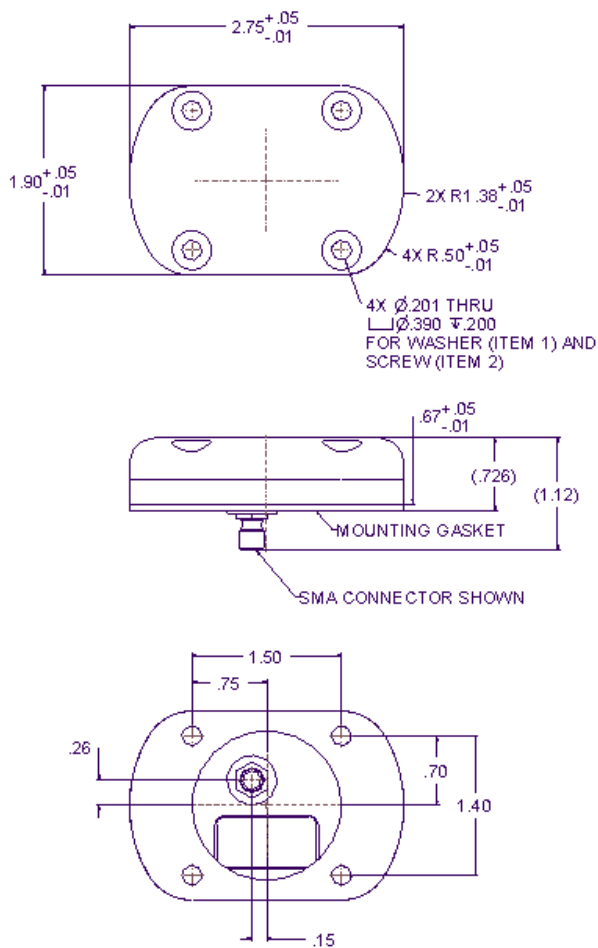
MECHANICAL & ENVIRONMENTAL

Designed to:

Weight (typical)	3.6 oz (103 g)
Temperature	-55°C to +85°C
Altitude	40,000 ft
Random Vibration	20 Grms

TYPICAL LNA PERFORMANCE

LNA Gain	
A option	28 dB ± 3 dB
A15 option	15 dB ± 3 dB
P option	Passive
LNA Noise Figure	3.5 dB
LNA P1dB Out	+11 dBm
Input Power	+2.7 to +15.0 VDC 25 mA
Power Handling	1 W
Group Delay Ripple	< 8 ns
Differential Propagation Delay	< 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 NavtechGPS for product details. www.NavtechGPS.com
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