



# Antcom's **G3 Antenna**, **Active L1 Glonass + L1 GPS + OmniStar Antenna**, P/N: **G3Ant-2AMNS1** **Magnetic Mount Configuration** *(with Filters, better RTK Performance, Optimized for L1 Glonass & L1 GPS & OmniStar)*

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

## SPECIFICATIONS

**ELECTRICAL:**

FREQUENCY:	OmniSTAR / L-Band		L1 GPS		L1 GLONASS	
	L6 Galileo	B1 Compass	E1, E2 Galileo	L1 IRNSS		
1542.50 ± 14.0 MHz			1575.42 ± 15.0 MHz		1609 ± 7.0 MHz	
1542.50 ± 5.0 MHz			1575.42 ± 17.0 MHz			
1561.098 ± 10.0 MHz			1575.42 ± 12.0 MHz			
<b>RADIATION PATTERN:</b>	HEMISPHERICAL					
<b>POLARIZATION:</b>	RHCP		RHCP		RHCP	
<b>VSWR:</b>	< 2.0:1		< 2.0:1		< 2.0:1	
<b>IMPEDANCE:</b>	50 ohms		50 ohms		50 ohms	
<b>ANTENNA GAIN (dBic):</b>	Free Space	5m G.P	Free Space	5m G.P	Free Space	5m G.P
@ 90° Elevation:	+1.9	+1.0	+4.1	+3.2	+2.0	+2.6
@ 10° Elevation:	-3.0	-5.7	-2.8	-3.2	-5.1	-4.2
@ 20° Elevation:	-3.9	-3.9	-1.9	-1.6	-4.1	-2.6
@ 30° Elevation:	-2.6	-3.0	-0.4	-0.6	-2.6	-1.4
@ 60 - 90° Elevation:	> +0.8	> +0.2	> 2.9	> +2.5	> +0.8	> +1.8
<b>BEAM WIDTH (3dB):</b>	95 Deg.	97 Deg.	95 Deg.	100 Deg.	95 Deg.	100 Deg.
<b>AXIAL RATIO:</b>	1 dB	1 dB	1 dB	1 dB	2 dB	2 dB
<b>LIGHTNING PROTECTION:</b>	DC GROUNDING					
<b>LNA GAIN:</b>	33 dB		32 dB		31 dB	
<b>LNA NOISE FIGURE:</b>	3.0 dB		3.0 dB		3.0 dB	
<b>LNA P1dB Out:</b>	+13 dBm		+13 dBm		+13 dBm	
<b>LNA DC POWER:</b>	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/≤50mA					
<b>POWER HANDLING:</b>	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)					

**MECHANICAL:**

**SIZE:** DIAMETER: 2.71 in. [ 68.81 mm]  
 HEIGHT: 0.864 in. [21.96 mm]

**WEIGHT:** 5.7 oz. (162 g)

**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5541F Class 1A

**MATERIAL:** 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,  
 SKYDROL RESISTANCE, AND FIRE RETARDANT

**CONNECTOR:** SMA FEMALE CONNECTOR

**ENVIRONMENTAL:**

**TEMPERATURE:** -67 °F TO +185 °F [-55 °C TO +85 °C]  
 70,000 ft.

**VIBRATION:** > 30 G's  
 HERMETICALLY SEAL

**FEDERAL & MILITARY SPECIFICATIONS:**

FAA TSO-C144, DO-160D, D0-228, MIL-C-5541,  
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

P/N: G3Ant-2AMNS1 Connector Color

SIZE:	LNA:	CABLE LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	42: ARINC 743	A: WITH LNA	S: SMA:	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	52: 2.6" DIA. ON 5" GROUND PLANE	X: NO CABLE	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA.	72: 7" DIA. CHOKER RING		T: TNC; N: N	-3: OLIVE DRAB GREEN #34084 PER FED-STD-595B
3: 3.5" DIA.				-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC				-5: TAN # : FS 23446 or 33446, FED-STD-595

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	ITEM NO
1	ADHESIVE GASKET	Magnet-Cover-2	-	-	5
1					4
1					3
1					2
1					1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS SHALL BE IN 16ths DECIMALS SHALL BE TO 0.005 ANGLES SHALL BE TO 1° SURFACE FINISH SHALL BE TO 125 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS SHALL BE IN 16ths DECIMALS SHALL BE TO 0.005 ANGLES SHALL BE TO 1° SURFACE FINISH SHALL BE TO 125 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS SHALL BE IN 16ths DECIMALS SHALL BE TO 0.005 ANGLES SHALL BE TO 1° SURFACE FINISH SHALL BE TO 125		<b>ANTCOM CORP.</b> TORRANCE, CALIFORNIA 2.6in Dia. FLUSH MAG MOUNT L1 Glonass + L1 GPS + OmniStar G3 ANTENNA
TOLERANCE SW PER ANSI Y14.5 BREAK ALL SHARP BREAK EXTERNAL EDGES .005 TO .015 FILED & CHAMFER TO 1/16" SLOPE 45 DEGS PER MIL-S-8879 DIMS ON A CORNER & OFF CORNERS MACHINED SURFACES V	DRAWN: S. HUYNH Mar-19-09 CHECKED: S. HUYNH Mar-19-09 DATE: 03/19/09 SCALE: 1/1 SHEET 1 OF 1	