



# Antcom's **G5 Antenna**, Active **L1/L2 Glonass + L1/L2 GPS + OmniStar** Antenna, P/N: G5Ant-52AT1 **Survey Mount Configuration** (with Filters, better RTK Performance, Optimized for L1/L2 Glonass & L1/L2 GPS & OmniStar)



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**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
		ECO# 0020, RELEASE	Mar-24-09	S. HUYNH

**SPECIFICATIONS**

**ELECTRICAL:**

	L5 GPS E5, E5a, E5b Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	OmniSTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS
<b>FREQUENCY:</b>	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	1609 ± 7.0 MHz
<b>RADIATION PATTERN:</b>	RHCP		RHCP		RHCP	
<b>POLARIZATION:</b>	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
<b>VSWR:</b>	50 ohms					
<b>IMPEDANCE:</b>	50 ohms					
<b>ANTENNA GAIN (dBi):</b>	HEMISPHERICAL					
@ 90° (ZENITH):	-1	+5.3	+2.8	+2.8	+4.9	+4.7
@ 10° Elevation:	-9	-2.7	-5.2	-6.0	-3.8	-4.2
@ 20° Elevation:	-7	-0.9	-3.6	-4.2	-2.1	-2.3
@ 30° Elevation:	-6	+0.4	-2.4	-2.4	-0.3	-0.6
@ 60 - 90° Elevation:	> -3	> 4.2	> 1.6	> +1.3	> +3.4	> +3.2
<b>BEAM WIDTH (3dB):</b>	85 Deg.	90 Deg.	90 Deg.	80 Deg.	80 Deg.	82 Deg.
<b>AXIAL RATIO:</b>	1.5 dB	1 dB	1 dB	3 dB	1 dB	4 dB
<b>LIGHTNING PROTECTION:</b>	DC GROUNDING					
<b>LNA GAIN:</b>	35 dB	35 dB	35 dB	33 dB	33 dB	33 dB
<b>LNA NOISE FIGURE:</b>	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB
<b>LNA P1dB Out:</b>	+13 dBm	+13 dBm	+13 dBm	+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: 5.00 in. [127.00 mm]  
HEIGHT: 1.68in [42.7mm]; 0.457in. [11.6 mm] Above G.P.

**WEIGHT:** 7oz. (199 g)

**FINISH:** SKYDROLRESISTANTPOLYURETHANENAMEL  
BASE IRIDITE PER MIL-C-5541FCLASS 1A

**MATERIAL:** 6061-T6ALUMINUMALLOYBASE  
COMPOSITE RADOME,IMPACT, ABRASION,UV, SOLVENT,  
SKYDROLRESISTANCE AND FIRE RETARDANT

**CONNECTOR:** TNC FEMALE CONNECTOR  
(OPTION: SMA, BNC, TNC Bulkhead, N,  
N Bulkhead, MCX, MMCX)

**ENVIRONMENTAL:**

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

**VIBRATION:** > 30 G's  
HERMETICALLYSEAL

**FEDERAL & MILITARY SPECIFICATIONS**

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

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

**TNC FEMALE CONNECTOR**  
(OPTION: SMA, BNC, TNC Bulkhead, N,  
N Bulkhead, MCX, MMCX)

**P/N: G5Ant-52AT1**

SIZE	LNA	CABLE LENGTH	CONNECTOR	COLOR
1.2" SQ.	42: ARINC743	A: WITH LNA	S: SMA; SMB; SMBR; B: BNC	-1: GLOSSWHITE#17925PER FED-STD-595B
1.9" 1.9" SQ.	52: 2.6" DIA. ON 5" GROUNDPLANE	X: NO CABLE	M: MCX; MMB; MMCX; MMR; MMCX-R	-2: LUSTERLESS GRAY#36320PER FED-STD-595B
2.6" DIA.	72: 7" DIA. CHOKERING		N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN#34094PER FED-STD-595B
3.3" DIA.	5: Bare on 5in [128mm] Dia. GroundPlane		T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK#37038PER FED-STD-595B
4: MINI ARINC	X.X: Bare on X.Xin Dia. GroundPlane		SMC, SSMC, SMB, SSMMA	

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	ITEM NO
1	5/8"-11 Mount		MTR-3B-G5	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .005 .015 ± 1°

DRIVER: K. Lee Mar-24-09

DESIGNED BY: S. HUYNH Mar-24-09

DATE: Mar-24-09

SCALE: 1/1

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

**ANTCOM CORP.**

SURVEY MOUNT,  
L1L2Glonass/L1L2GPS/OmniStar  
**G5 ANTENNA**

P/N: G5Ant-52AT1

SCALE 1/1 SHEET 1 OF 1