

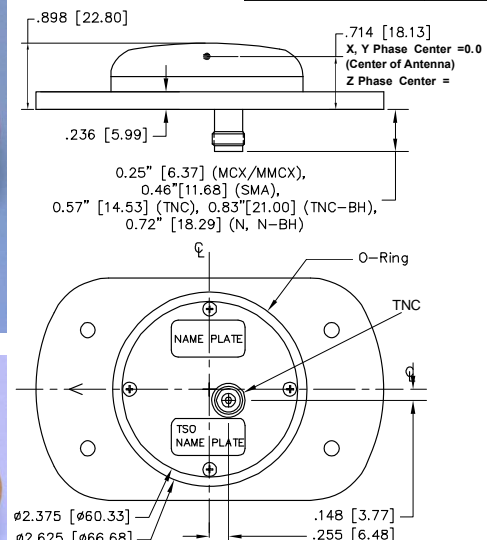
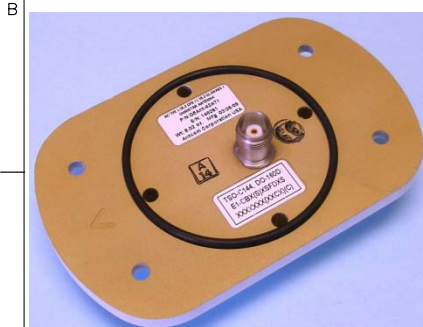
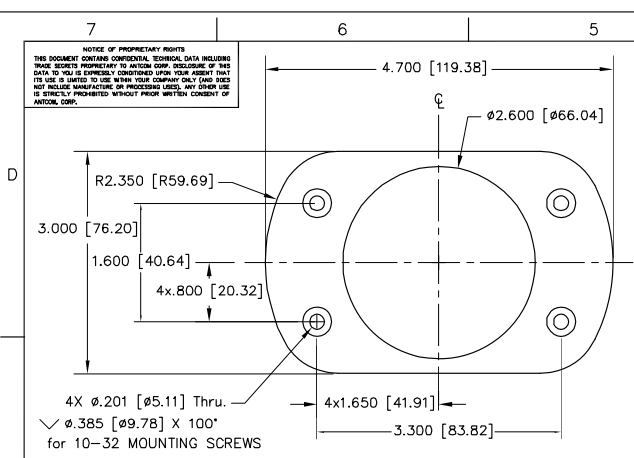


# Antcom's **G5 Antenna**, **Active L1/L2 Glonass + L1/L2 GPS + OmniStar Antenna, P/N: G5Ant-42AT1** **Avionics Arinc 743 Configuration** *(with Filters, better RTK Performance, Optimized for L1/L2 Glonass & L1/L2 GPS & OmniStar)*

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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	
FREQUENCY:		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	
RADIATION PATTERN:		RHCP		RHCP		RHCP		RHCP		RHCP		RHCP	
VSWR:		< 2.0:1		< 2.0:1		< 2.0:1		< 2.0:1		< 2.0:1		< 2.0:1	
IMPEDANCE:		50 ohms		50 ohms		50 ohms		50 ohms		50 ohms		50 ohms	
ANTENNA GAIN (dBi):		Free Space 4 ft G.P.		Free Space 4 ft G.P.		Free Space 4 ft G.P.		Free Space 4 ft G.P.		Free Space 4 ft G.P.		Free Space 4 ft G.P.	
@ 90° (ZENITH):		-3 -3 +3.1 +4.8 +1.5 +2.4 +1.0 -2.0 +3.3 +2.0 +2.7 +1.4		-3 -3 +3.1 +4.8 +1.5 +2.4 +1.0 -2.0 +3.3 +2.0 +2.7 +1.4		-3 -3 +3.1 +4.8 +1.5 +2.4 +1.0 -2.0 +3.3 +2.0 +2.7 +1.4		-3 -3 +3.1 +4.8 +1.5 +2.4 +1.0 -2.0 +3.3 +2.0 +2.7 +1.4		-3 -3 +3.1 +4.8 +1.5 +2.4 +1.0 -2.0 +3.3 +2.0 +2.7 +1.4		-3 -3 +3.1 +4.8 +1.5 +2.4 +1.0 -2.0 +3.3 +2.0 +2.7 +1.4	
@ 10° Elevation:		-10 -10 -3.9 -3.5 -5.8 -6.3 -5.5 -5.1 -3.0 -2.5 -3.7 -3.4		-10 -10 -3.9 -3.5 -5.8 -6.3 -5.5 -5.1 -3.0 -2.5 -3.7 -3.4		-10 -10 -3.9 -3.5 -5.8 -6.3 -5.5 -5.1 -3.0 -2.5 -3.7 -3.4		-10 -10 -3.9 -3.5 -5.8 -6.3 -5.5 -5.1 -3.0 -2.5 -3.7 -3.4		-10 -10 -3.9 -3.5 -5.8 -6.3 -5.5 -5.1 -3.0 -2.5 -3.7 -3.4		-10 -10 -3.9 -3.5 -5.8 -6.3 -5.5 -5.1 -3.0 -2.5 -3.7 -3.4	
@ 20° Elevation:		-9 -7 -7 -2.3 -0.3 -3.9 -3.2 -3.9 -1.9 -1.6 +0.4 -1.5 -0.5		-9 -7 -7 -2.3 -0.3 -3.9 -3.2 -3.9 -1.9 -1.6 +0.4 -1.5 -0.5		-9 -7 -7 -2.3 -0.3 -3.9 -3.2 -3.9 -1.9 -1.6 +0.4 -1.5 -0.5		-9 -7 -7 -2.3 -0.3 -3.9 -3.2 -3.9 -1.9 -1.6 +0.4 -1.5 -0.5		-9 -7 -7 -2.3 -0.3 -3.9 -3.2 -3.9 -1.9 -1.6 +0.4 -1.5 -0.5		-9 -7 -7 -2.3 -0.3 -3.9 -3.2 -3.9 -1.9 -1.6 +0.4 -1.5 -0.5	
@ 30° Elevation:		-7 -5 -4 -0.4 +1.8 -2.1 -1.2 -3.3 -0.5 -0.8 +1.6 -2.5 +0.5		-7 -5 -4 -0.4 +1.8 -2.1 -1.2 -3.3 -0.5 -0.8 +1.6 -2.5 +0.5		-7 -5 -4 -0.4 +1.8 -2.1 -1.2 -3.3 -0.5 -0.8 +1.6 -2.5 +0.5		-7 -5 -4 -0.4 +1.8 -2.1 -1.2 -3.3 -0.5 -0.8 +1.6 -2.5 +0.5		-7 -5 -4 -0.4 +1.8 -2.1 -1.2 -3.3 -0.5 -0.8 +1.6 -2.5 +0.5		-7 -5 -4 -0.4 +1.8 -2.1 -1.2 -3.3 -0.5 -0.8 +1.6 -2.5 +0.5	
@ 60 - 90° Elevation:		> -4 > -4 > 2.0 > 2.6 > 0.3 > 0.1 > 0.3 > 0.5 > 2.6 > 1.6 > 2.0 > -0.2		> -4 > -4 > 2.0 > 2.6 > 0.3 > 0.1 > 0.3 > 0.5 > 2.6 > 1.6 > 2.0 > -0.2		> -4 > -4 > 2.0 > 2.6 > 0.3 > 0.1 > 0.3 > 0.5 > 2.6 > 1.6 > 2.0 > -0.2		> -4 > -4 > 2.0 > 2.6 > 0.3 > 0.1 > 0.3 > 0.5 > 2.6 > 1.6 > 2.0 > -0.2		> -4 > -4 > 2.0 > 2.6 > 0.3 > 0.1 > 0.3 > 0.5 > 2.6 > 1.6 > 2.0 > -0.2		> -4 > -4 > 2.0 > 2.6 > 0.3 > 0.1 > 0.3 > 0.5 > 2.6 > 1.6 > 2.0 > -0.2	
BEAM WIDTH (3dB):		100 Deg. 120 Deg.		105 Deg. 115 Deg.		100 Deg. 110 Deg.		95 Deg. 145 Deg.		100 Deg. 150 Deg.		100 Deg. 145 Deg.	
AXIAL RATIO:		3 dB 2 dB		1 dB 1 dB		1 dB 2 dB		1 dB 2 dB		1 dB 1 dB		1.5 dB 3 dB	
LIGHTNING PROTECTION:		DC GROUNDING		DC GROUNDING		DC GROUNDING		DC GROUNDING		DC GROUNDING		DC GROUNDING	
LNA GAIN:		35 dB		35 dB		35 dB		33 dB		33 dB		33 dB	
LNA NOISE FIGURE:		3.0 dB		3.0 dB		3.0 dB		3.0 dB		3.0 dB		3.0 dB	
LNA P1dB Out:		+13 dBm		+13 dBm		+13 dBm		+13 dBm		+13 dBm		+13 dBm	
LNA DC POWER:				2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA									
POWER HANDLING:				1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)									

**MECHANICAL:**  
 SIZE: WIDTH: 3.00 in. [76.20 mm], LENGTH: 4.700 in. [119.38 mm], HEIGHT: 0.898 in. [22.80 mm]  
 WEIGHT: 8.02 oz. (227 g)  
 FINISH: SKYDROLRESISTANTPOLYURETHANENAMEL BASE IRIDITE PER MIL-C-5541FCLASS 1A  
 MATERIAL: 6061-T6ALUMINUMALLOY BASE COMPOSITE RADOME,IMPACT,ABRASION,UV, SOLVENT, SKYDROLRESISTANCEAND FIRE RETARDANT  
 CONNECTOR: TNC TYPE FEMALE (OPTION: SMA, BNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX)  
**ENVIRONMENTAL:**  
 TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
 ALTITUDE: 70,000 ft  
 VIBRATION: > 30 Gs  
 LEAKAGE: HERMETICALLYSEAL

**FEDERAL & MILITARY SPECIFICATIONS**  
**DESIGN TO:** 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

2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM  
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
 NOTES: UNLESS OTHERWISE SPECIFIED:

P/N: G5Ant-42AT1

CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; B: BNC	-1: GLOSSWHITE#17925PER FED-STD-595B
	M: MCX; MM: MMCX	-2: LUSTERLESSGRAY#36320PER FED-STD-595B
	N: N; NB: N-Bulkhead	-3: OLIVE DRABGREEN#34094PER FED-STD-595B
	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESSBLACK#37038PER FED-STD-595B

QUANTITY	DESCRIPTION	PART NO	FINISH	ITEM NO
4	Mounting Screw: 10-32, 1"	MS24693C276		5
1	O-Ring or Gasket	2-142/N756-75		4
				3
				2
				1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE DECIMALS AND ANGLES ± 1/64 .005 .015 .002 ± 1°

DRW: K. LEE Mar-23-09  
 CHECKED:  
 DRAWN:  
 APPROVED: S. HUYNH Mar-23-09  
 CAD FILE NO:

**ANTCOM CORP.** TORRANCE, CALIFORNIA  
 743 ARINC, ACTIVE  
 L1L2Glonass/L1L2GPS/OmniStar  
 G5 ANTENNA  
 D13CVE1  
 G5Ant-42AT1  
 SCALE 1/1 SHEET 1 OF 1