



Antcom's **G3 Antenna**, Active **L1 Glonass + L1 GPS + OmniStar** Antenna, P/N: G3Ant-72AT1 **Choke Ring, Survey Mount Configuration** (with Filters, better RTK Performance, Optimized for L1 Glonass & L1 GPS & OmniStar)



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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	OmniSTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS
FREQUENCY:	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:	HEMISPHERICAL		
POLARIZATION:	RHCP	RHCP	RHCP
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBi):			
@ 90° (ZENITH):	+ 4.7	+ 6.9	+ 6.0
@ 10° Elevation:	- 6.5	- 4.1	- 5.4
@ 20° Elevation:	- 4.3	- 2.0	- 3.1
@ 30° Elevation:	- 2.3	- 0.1	- 1.2
@ 60 - 90° Elevation:	> + 2.7	> + 5.0	> + 4.0
BEAM WIDTH (3dB):	70 Deg.	70 Deg.	70 Deg.
AXIAL RATIO:	2 dB	1 dB	4 dB
LIGHTNING PROTECTION:	DC GROUNDING		
LNA GAIN:	33 dB	33 dB	33 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA		
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)		

X, Y Phase Center = 0.0 (Center of Antenna)
Z Phase Center = 3.043 [77.30]

MECHANICAL:

SIZE: DIAMETER: 7.10 in. [180.44 mm]
HEIGHT: 3.93 in. [99.82 mm]

WEIGHT: 1.82 lbs. (825 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

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]

ALTITUDE: 70,000 ft.

VIBRATION: > 30 G's

LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

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

P/N: G3Ant-72AT1 Connector Color

SIZE:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	42: ARINC 743	A: WITH LNA	S: SMA, SMB, SMBR, B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.6, 1.9" SQ.	52: 2.6" DIA. ON 5" GROUND PLANE	X: NO CABLE	M: MCX, MM: MMCX, MMR: MMCX-R	-2: LUSTERLESS GRAY #38320 PER FED-STD-595B
2: 2.5" DIA.	72: 7" DIA. CHOKER RING		N: N, NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.	5: Bare on 5in [126mm] Dia. Ground Plane		T: TNC, TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC	X.X: Bare on X.Xin Dia. Ground Plane		SMC, SSMC, SSMB, SSMA	

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	ITEM NO.
	Radome	72GNSS2-A-XT-R		5
1	1"-14 Mount (Optional)	MTR-3B2		4
1	5/8"-11 Mount	MTR-3B		3
	Choke Ring	7G1215P001-B3 Rev G		2
1				1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS AND ANGLES	DRAWN
± 1/64 .015 ± 1'	
TOLERANCE 5% PER ANSI Y14.5	CHECKED
REMOVE ALL BURRS	ENGINEER
BREAK EXTERNAL EDGES .005 TO .015	APPROVED
CHOKER RING TO BE USED ON ALL ANTENNAS	
DATE'S ON A COMMON E-2 OF 008	
MACHINED SURFACES	
DO NOT SCALE DRAWING	

ANTCOM CORP. TORRANCE CALIFORNIA

SURVEY MOUNT,
L1 Glonass/L1 GPS/OmniStar
G3 Choke Ring Antenna

DATE: 03/20/12
DRAWING NO: G3Ant-72AT1
SCALE: 1/1
SHEET 1 OF 1