



FAA Approved Facility

The SURVEY I

New High Performance Ruggedized Survey Mount 1 GNSS Antenna

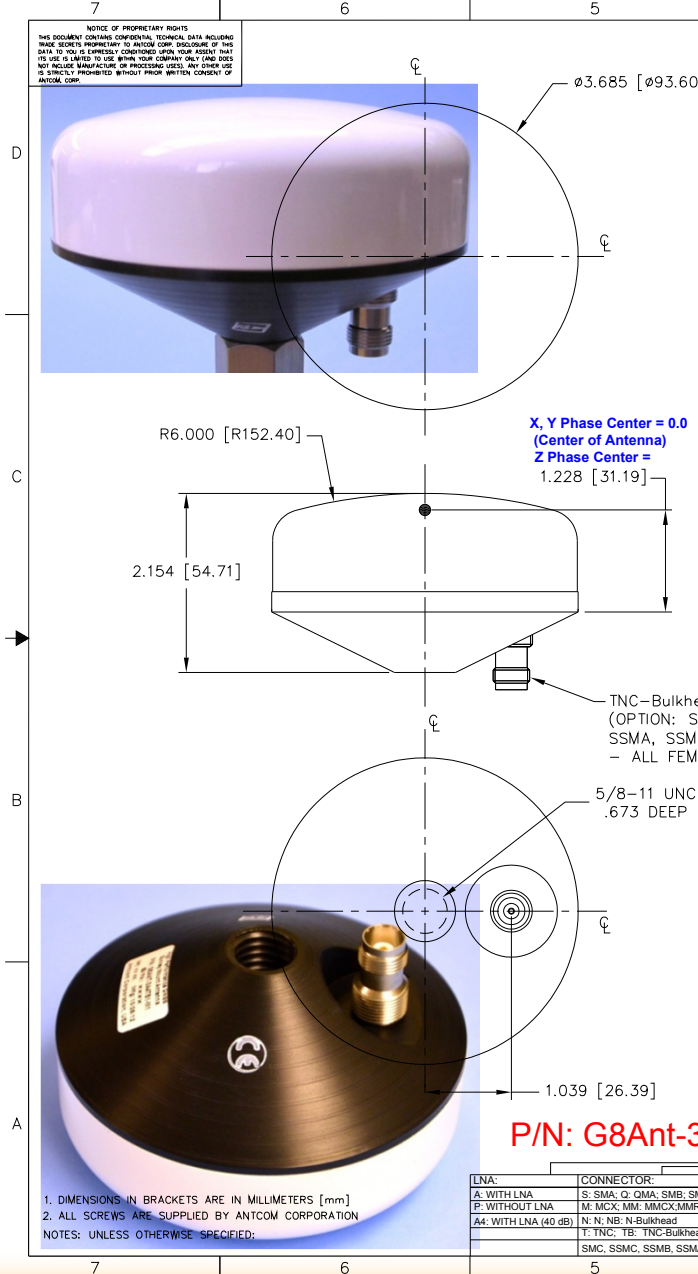
P/N: **G8Ant-3A4TB1-M1** Rev A
For Survey, Mining, and Ground Applications

Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

“-HF” for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: **-24dB@1616MHz**, **-34dB@1625-1660MHz**,
“-HFO” for Additional Omnistar Rejection: **-27dB@1545MHz**



SPECIFICATIONS

ZONE	REVISIONS					
	REV	DESCRIPTION	DATE	APPROVED		
ELECTRICAL:						
FREQUENCY:						
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	
1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 12 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1242 - 1252 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	1598 - 1609 MHz	
RADIATION PATTERN:						
HEMISPHERICAL						
POLARIZATION:						
RHCP						
VSWR:						
< 2.0:1						
IMPEDANCE:						
50 ohms						
ANTENNA GAIN (dBi):						
@ 90° Above Horizon (Top): +0.2						
@ 15° Above Horizon: -4.5						
@ 20° Above Horizon: -3.5						
@ 25° Above Horizon: -2.5						
@ 30° Above Horizon: -2.2						
@ 70° Above Horizon: -0.2						
BEAM WIDTH (3dB):						
124 Deg.						
AXIAL RATIO:						
1 dB						
MULTIPATH REJECTION (RHCP/LHCP):						
@ 90° Above Horizon (Top): 34 dB						
@ 0° Above Horizon: 8 dB						
@ 15° Above Horizon: 14 dB						
@ 25° Above Horizon: 19 dB						
LIGHTNING PROTECTION:						
DC GROUNDING						
LNA GAIN:						
42 dB						
LNA NOISE FIGURE (With Filter):						
2.6 dB						
LNA P1dB Out:						
+10 dBm						
LNA DC POWER:						
(3.3-24V) < 50mA						
POWER HANDLING:						
3 Watt CW (With Limiter)						

MECHANICAL:

SIZE: DIAMETER: 3.68 in. [93.6mm]
HEIGHT: 2.15 in [54.7mm]

WEIGHT: 14.6oz. (413.9 g)

FINISH: BASE: HARD BLACK ANODIZE PER MIL-A-8625F, TYPE III, CLASS 2
RADOME: SKYDROL RESISTANT POLYURETHANE ENAMEL PER FED-STD-595B

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

CONNECTOR: TNC Bulkhead (OPTION: SMA, QMA, SMB, SMC, SSMA, SSMB, SSMC, MCX, MMCX)

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, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:

 ATP-GPS-1L12-100

P/N: **G8Ant-3A4TB1-M1**

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
NOTES: UNLESS OTHERWISE SPECIFIED:

LNA:	CONNECTOR:	COLOR:
A: WITH LNA	S: SMA; Q: QMA; SMB; SMR; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
P: WITHOUT LNA	M: MCX; MM: MMCX; MMR: MMCX-R	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
N: N: NB: N-Bulkhead	T: TNC; TB: TNC-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
A4: WITH LNA (40 dB)	S: SMA; Q: QMA; SMB; SMR; B: BNC	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	S: SMA; Q: QMA; SMB; SMR; B: BNC	-5: DESERT TAN #33446 PER FED-STD-595B

QUANTITY	DESCRIPTION	PART NO	FINISH	REV
				2
				1

UNLESS OTHERWISE SPECIFIED	ORIGINALLY DRAWN	S. HUYNH
DIMENSIONS ARE IN INCHES	Mar-24-09	
TOLERANCES UNLESS OTHERWISE SPECIFIED	Mar-24-09	
FRACTIONS: 1/16, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8	Mar-24-09	
DECIMALS: .015, .030, .045, .060, .075, .090, .110, .130, .150, .170, .190, .210, .230, .250, .270, .290, .310, .330, .350, .370, .390, .410, .430, .450, .470, .490, .510, .530, .550, .570, .590, .610, .630, .650, .670, .690, .710, .730, .750, .770, .790, .810, .830, .850, .870, .890, .910, .930, .950, .970, .990	Mar-24-09	
ANGLES: ± 1°	Mar-24-09	
TOLERANCE SURF PER ANG 174.6	Mar-24-09	
REMOVE ALL BURRS	Mar-24-09	
BREAK EXTERNAL EDGES .006 TO .015	Mar-24-09	
FILES 15, 20, 30, 40	Mar-24-09	
SOFTEN THREADS PER MIL-S-8879	Mar-24-09	
DRY'S ON A COMMON 6.27.009	Mar-24-09	
MACHINED SURFACES 1/2"	Mar-24-09	
DO NOT SCALE DRAWING	Mar-24-09	

DATE	CHKD BY	DRWING NO	REV
10/30/11	S. HUYNH	G8Ant-3A4TB1-M1	1

ANTCOM CORP. TORRANCE CALIFORNIA
3.7in. DIAMETER SURVEY MOUNT 1 GNSS ANTENNA
SCALE 1/1" SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas