

Survey Mount Configuration

(with Filters, better RTK Performance, Optimized for L1/L2 Glonass & L1/L2 GPS & OmniStar/TerraStar)

FAA Approved Facility

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

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"-HF" for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: -22dB@1616MHz, -34dB@1625-1660MHz
 "-HFO" for Additional OmniStar/TerraStar Rejection: -27dB@1545MHz

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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

FREQUENCY (MHz):	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	QUAD-BAND (GSM/PCS) L-Band Locata/Wi-Fi/S/C-Band
	1176.45 ± 12 1164.45 - 1219.14 1176.45 ± 15	1227.60 ± 12 1207.14 ± 10	1262.50 ± 7.5 1266.75 - 1290.75 1268.52 ± 10	1542.50 ± 14.0 1542.50 ± 5.0 1561.098 ± 10	1575.42 ± 15.0 1575.42 ± 17.0 1575.42 ± 12.0	1609 ± 7.0	824-960, 1710-1990 1600-1990 2300-2500, 4400-5000
RADIATION PATTERN:	HEMISPHERICAL						
POLARIZATION:	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	OMNI
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	VERTICAL
IMPEDANCE:	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	(2.0-3.5):1
ANTENNA GAIN (dBi):	(0-3.8) dBi						
@ 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	
BEAM WIDTH (3dB):	85 Deg.	90 Deg.	90 Deg.	80 Deg.	80 Deg.	82 Deg.	OMNI
AXIAL RATIO:	1.5 dB	1 dB	1 dB	3 dB	1 dB	4 dB	N/A
LIGHTNING PROTECTION:	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	N/A
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-)						

MECHANICAL:

SIZE: DIAMETER: 5.000 in. [127.00 mm]
 HEIGHT: 4.807 in. [122 mm] Above G.P.

WEIGHT: 10.5oz. (297g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5541F

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

CONNECTOR: GNSS: TNC FEMALE; Locata/QUAD-BAND: TNC FEMALE
 (OPTION: SMA, BNC, TNC Bulkhead, N, N Bulkhead, 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:

MIL-STD-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

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
1	5/8"-11 Mount		

QUANTITY REQUIRED

DESCRIPTION	PART NO	FINISH	QTY
5/8"-11 Mount	MTR-3B-G5		1

ANTCOM CORP. TORRANCE CALIFORNIA

SURVEY MOUNT
 L1L2-GPS/L1L2-Glonass/OmniStar,
 QUAD-BAND(GSM/PCS), L-Band,
 Locata/Wi-Fi/S/C-Band Antenna

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 FRACTIONS SHALL BE IN 16THS OF AN INCH
 DECIMALS SHALL BE TO 0.005
 ANGLES SHALL BE TO 1°
 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS
 FRACTIONS SHALL BE IN 10THS OF A MILLIMETER
 DECIMALS SHALL BE TO 0.05
 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS
 FRACTIONS SHALL BE IN 10THS OF A MILLIMETER
 DECIMALS SHALL BE TO 0.05

DO NOT SCALE DRAWING

SIZE:
 1: 2" SQ.
 1.9: 1.9" SQ.
 2: 2.6" DIA.
 3: 3.5" DIA.
 4: MINI ARINC

SIZE:
 42: ARINC 743
 52: 2.6" DIA. ON 5" GROUND PLANE
 72: 7" DIA. CHOKE RING
 5: Bare on 5in [126mm] Dia. Ground Plane
 X.X: Bare on X.Xin Dia. Ground Plane

LNA:
 A: WITH LNA
 P: WITHOUT LNA

CABLE'S LENGTH:
 X: NO CABLE

GNSS/Locata CONNECTOR:
 S: SMA; SMB; SMR; B: BNC
 M: MCX; MM; MMCX; MMR; MMCX-R
 N: N; NB: N-Bulkhead
 T: TNC; TB: TNC-Bulkhead
 SMC, SSM, SMB, SSMA

COLOR:
 -1: GLOSS WHITE #17925 PER FED-STD-595B
 -2: LUSTERLESS GRAY #36320 PER FED-STD-595B
 -3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
 -4: LUSTERLESS BLACK #37038 PER FED-STD-595B

REMOVE ALL BURRS
 BREAK EXTERNAL EDGES 0.05 TO 0.15
 FILED OR 0.05 TO 0.10
 SCREEN SURFACES PER MIL-C-8839
 PARTS ON A COMMON LOT OF 500
 MACHINED SURFACES TO 12.5

CHECKED: S. HUYNH
ENGINEER: Mar-20-11

APPROVED: S. HUYNH
 Mar-20-11

SCALE: 1/1

SHEET: 1 OF 1

P/N: G5Ant-52ATT1-Lo1