5in Dia. GNSS Survey Antenna for Global Navigation Satellite Systems (GNSS) Applications

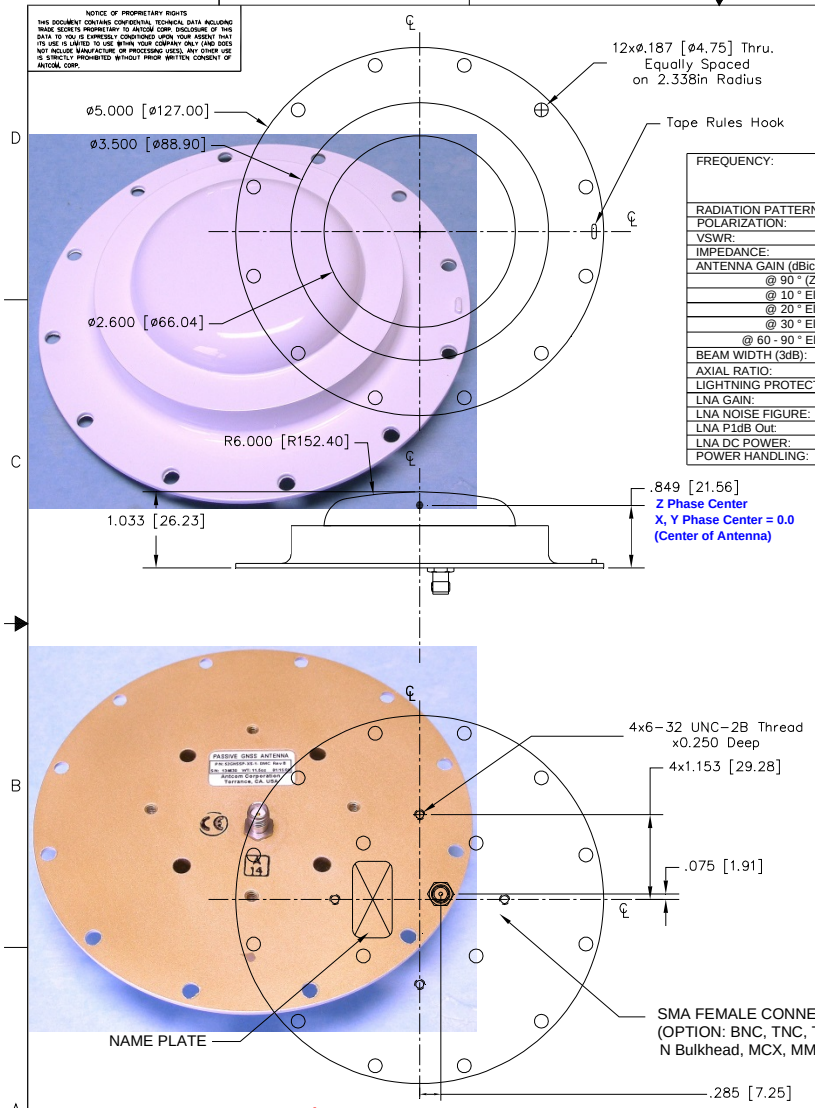
P/N: 52GNSSA-XX-X-DMC Rev B (DMC Foot Print)

FAA Approved Facility

Antenna Mounts: 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: -22dB@1616MHz, -34dB@(1625-1660)MHz "-HFO" for Additional Omnistar Rejection: -27dB@1545MHz



P/N: 52GNSSA-XT-1

SIZE:		LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	42: ARINC 743	A: WITH LNA	X: NO CABLE	S: SMA; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	52: 2.6" DIA. ON 5" GROUND PLANE	P: WITHOUT LNA		M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA.	72: 7" DIA. CHOKE RING			N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.				T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC					

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ECO# 0005, RELEASE	11-06-08	S. HUYNH
	B	DMC Mounting Holes, Tape Hook	Dec-30-08	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	
FREQUENCY:	1176.45 ± 12.0 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15.0 MHz		1227.60 ± 12.0 MHz 1207.14 ± 10.0 MHz		1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10.0 MHz		1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10.0 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		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 (dBic):	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):	- 0.6	+ 2.4	+ 3.5	+ 3.6	+ 3.0	+ 2.3	+ 0.2	- 2.5	+ 3.6	+ 3.5	+ 0.1	- 2.1
@ 10 ° Elevation:	- 7.2	- 4.5	- 3.0	- 3.6	- 3.6	- 5.4	- 8.6	- 7.1	- 5.0	- 1.2	- 8.9	- 7.7
@ 20 ° Elevation:	- 5.8	- 1.6	- 1.6	- 0.4	- 2.5	- 1.9	- 7.0	- 4.0	- 3.3	+ 1.6	- 7.0	- 4.9
@ 30 ° Elevation:	- 4.8	+ 0.1	- 0.8	+ 1.5	- 1.6	- 0.1	- 5.2	- 2.8	- 1.7	+ 2.1	- 5.5	- 4.5
@ 60 - 90 ° Elevation:	> - 1.7	> - 0.7	> 2.6	> 0.6	> 1.9	> 0.1	> - 1.3	> -5.0	> 2.3	> -1.5	> - 1.4	> -8.6
BEAM WIDTH (3dB):	102 Deg.	128 Deg.	102 Deg.	130 Deg.	98 Deg.	120 Deg.	90 Deg.	125 Deg.	94 Deg.	135 Deg.	92 Deg.	130 Deg.
AXIAL RATIO:	0.5 dB		0.5 dB		1.5 dB		1.0 dB		5.0 dB		6.0 dB	
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	
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: 5.00 in. [127.00 mm]
HEIGHT: 1.033 in. [26.23 mm]

WEIGHT: 13.6 oz. (385 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL WITH NICKEL PLATED BASE

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, 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]
70,000 ft.

VIBRATION: > 30 G's
HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

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

ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO
	PARTS LIST			
				5
				4
1	5.0" DIA. GROUND PLANE	12G1215P001-B2Gb	–	3
				2
1	5/8"-11 Mount	MTR-3B	–	1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES, IN INCHES
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .005 TO R .030
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON Ø .27.005
MACHINED SURFACES 125
DRAWN
CHECKED
ENGINEER
APPROVED S. HUYNH 11-06-08
CAD FILE NO
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING
ACTIVE OR PASSIVE
GNSS SURVEY ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 52GNSSX-XX-X-DMC | REV B
SCALE 1/1 | SHEET 1 OF 1