



FAA Approved Facility

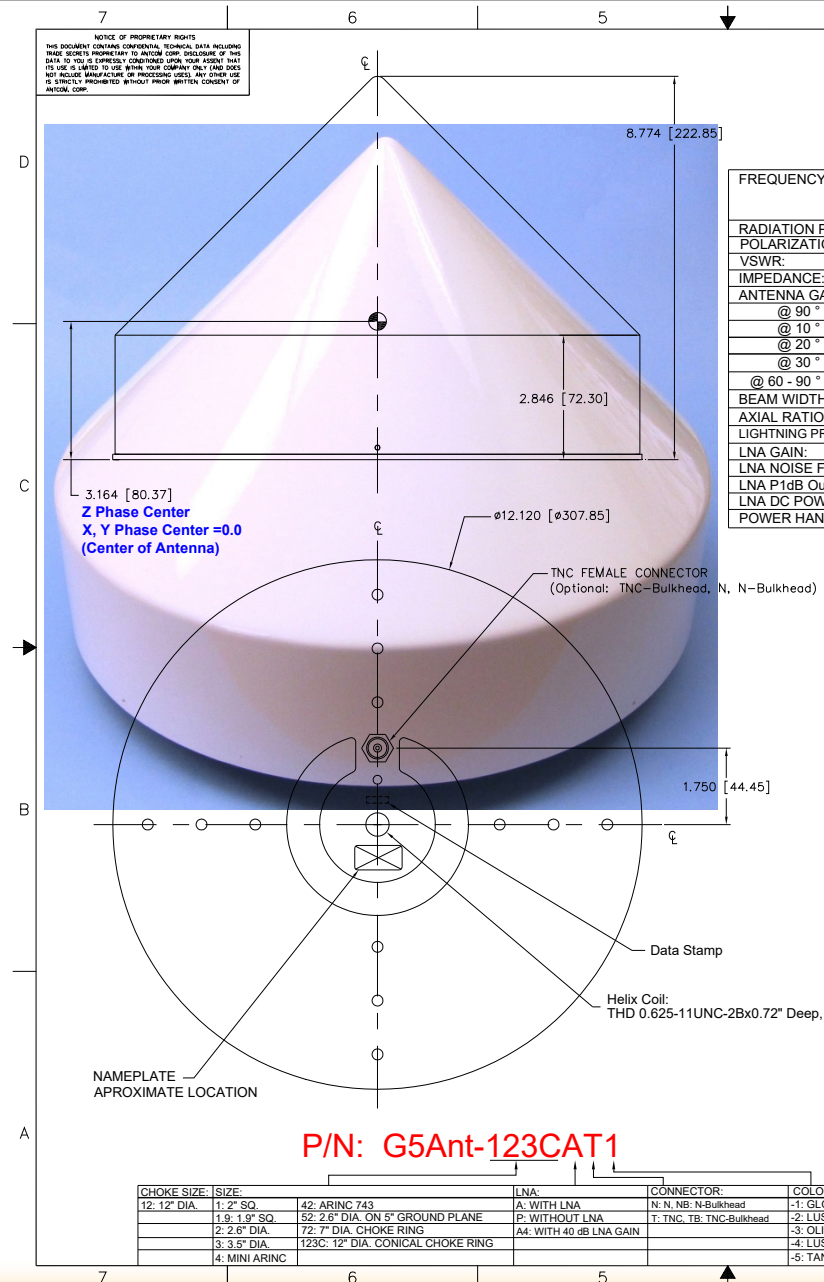
Antcom's G5 Antenna, Active L1/L2 GPS + L1/L2 Glonass + OmniStar/TerraStar Choke Ring Antennas, P/N: G5Ant-123CAT1 12" Dia. x 8.77" High, Pipe Mount Configurations

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@1625-1660MHz
“-HFO” for Additional OmniStar/TerraStar Rejection: -27dB@1545MHz



SPECIFICATIONS

ELECTRICAL:

ZONE	REV	DESCRIPTION	DATE	REQUESTED	REVISED	APPROVED
-		UPDATE FROM 123GM1215A-XT FOR ELECTRICAL SPECS OF GB ANTENNA	06/08/12	K.L.	P.T.	K.L.

	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	(1598 - 1606) 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 (dBi):						
@ 90 ° (ZENITH):	- 2.8	+ 6.7	+ 6.0	+ 4.7	+ 7.8	+ 3.6
@ 10 ° Elevation:	- 19.8	- 10.3	- 9.0	- 8.8	- 6.0	- 10.4
@ 20 ° Elevation:	- 22.4	- 6.3	- 6.0	- 6.7	- 4.9	- 7.9
@ 30 ° Elevation:	- 21.8	- 3.1	- 3.0	- 3.8	- 1.2	- 5.2
@ 60 - 90 ° Elevation:	> - 6.9	> + 4.7	> +3.5	> + 2.0	> + 5.1	> + 0.6
BEAM WIDTH (3dB):	47 Deg.	63 Deg.	66 Deg.	63 Deg.	64 Deg.	63 Deg.
AXIAL RATIO:	1.7 dB	.4 dB	.8 dB	1 dB	1.2 dB	3 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: 12.1in. [308 mm]
HEIGHT: 8.77 in. [222.8 mm]

WEIGHT: 9.04 lbs. (4.1 Kg)

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: TNC Bulkhead, N, N-Bulkhead)

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

QUANTITY	REQD	DESCRIPTION	PART NO	REV
4	-	MOUNTING SCREWS	MS24693C273	5
1	1	INTERNAL ANTENNA / CABLE	G5Ant-3A51 / SMA-MR-RG316-3.2in-TNC-FB	4
1	1	CHOKE RING ADAPTER	12G1215P001-B4	3
1	1	CHOKE RING / PLUGS	12G1215P001-B3 / 85985K12	2
1	1	RADOME	12G1215-R-6	1
-2	-1	DESCRIPTION	PART NO	REV

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS SHALL BE IN 16ths UNLESS OTHERWISE SPECIFIED ANGLES ± 1/64 ° ± 0.015 ° ± 1' ± 1'

TOLERANCE S/W PER AND Y14.6 REMOVE ALL SHARP BREAK EXTERNAL EDGES .000 TO .015 S/W PER Y14.5 PER MIL-C-2879 DIM'S IN A COMMON & 20-005 MACHINED SURFACES 12/

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA
OUTLINE DRAWING
ACTIVE G5 CHOKE RING
GPS ANTENNA

DATE: 03/31/12
DRAWN BY: S. HUYNH
CHECKED BY: S. HUYNH
APPROVED BY: S. HUYNH
DATE: 03/31/12

SCALE: 1/1
SHEET: 1 OF 1

CHOKE SIZE:	SIZE:	LNA:	CONNECTOR:	COLOR:
12.12" DIA.	1: 2" SQ.	42: ARINC 743	A: WITH LNA N: N, NB: N-Bulkhead	-1: GLOSS WHITE #17925 PER FED-STD-595B
	1.9: 1.9" SQ.	52: 2.6" DIA. ON 5" GROUND PLANE	P: WITHOUT LNA	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	2: 2.6" DIA.	72: 7" DIA. CHOKE RING	A4: WITH 40 dB LNA GAIN	-3: OLIVE DRAB GREEN #34084 PER FED-STD-595B
	3: 3.5" DIA.	123C: 12" DIA. CONICAL CHOKE RING		-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	4: MINI ARINC			-5: TAN #: FS 23446 or 33446, FED-STD-595

P/N: G5Ant-123CAT1