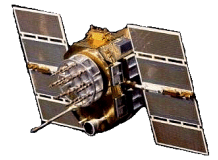




# Active L1/L2 GPS Choke Ring Antennas, P/N: 123GM1215A-XT-1

## 12" Diameter x 8.7" High, Pipe Mount Configuration

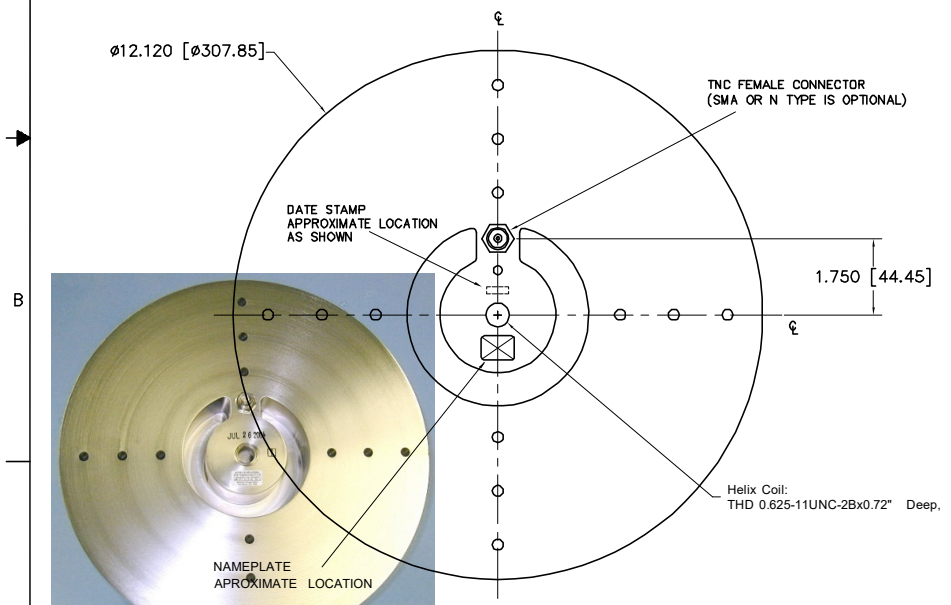
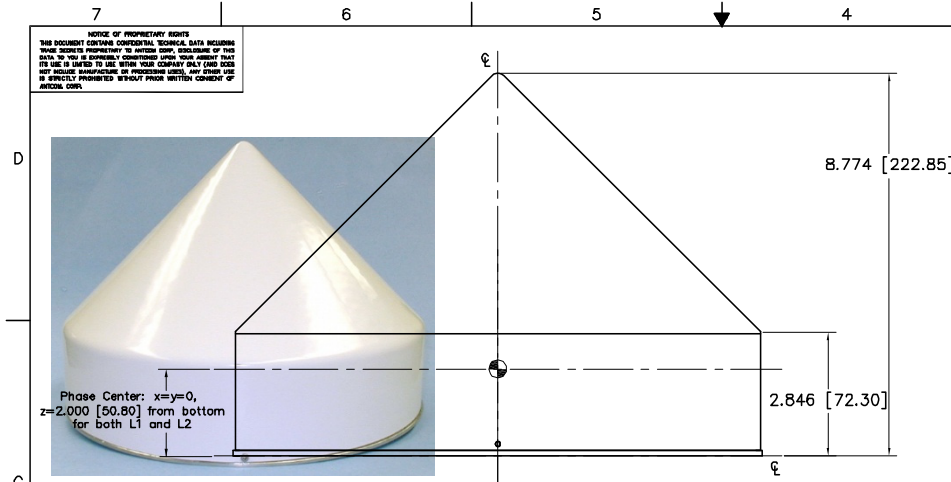


ISO 9001:2008/FAA Approved Facility

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

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

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**P/N: 123GM1215A-XT-1**

CHOKE SIZE:	ANT. SIZE:	FREQ. BAND:	LNA:	CABLES LENGTH:	CONNECTOR:	COLOR:
12: 12 in Dia.	1: 2" SQ.	1215: L1/L2	A: WITH 33 dB LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
	1.9: 1.9" SQ.	15: L1 ONLY	A2: WITH 20 dB LNA	M: MAG. N: NO MAG.	M: MCK; MM: MMCKX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	2: 2.9" DIA.		A4: WITH 49 dB LNA	#: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	3: 3.5" DIA.			R: RIGHT ANGLE CON.	T: TB; TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	4: MINI ARINC		P: WITHOUT LNA			

SPECIFICATIONS		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 ±13) MHz	L2: (1227.60 ±13) MHz		
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP	RHCP		
VSWR:	< 1.5:1	< 1.5:1		
IMPEDANCE:	50 ohms			
GAIN (dBiC) & AR (dB)	GAIN	AR	GAIN	AR
@ 90° (Zenith):	+7.7	0.2	+4.7	1.0
@ 10° Elevation:	-5.3	3.0	-9.9	10
@ 20° Elevation:	-2.7	3.0	-6.5	7.0
@ 30° Elevation:	-0.4	3.0	-3.6	5.0
@ 45° Elevation:	+2.9	2.0	0.0	4.0
@ 70° Elevation:	+6.8	1.0	+3.5	1.5
BEAM WIDTH (3dB)	67.4 Deg.			63.5 Deg.
LIGHTNING PROTECTION:	DC GROUNDING			
LNA GAIN:	20 dB (...A2-...), 33 dB (...A-...), 40 dB (...A4-...)			
LNA NOISE FIGURE:	1.9 dB			
LNA P1dB Out:	+13 dBm			
LNA DC POWER:	(2.5-24) V / < 35 mA			

**MECHANICAL:**

SIZE: DIAMETER: 12.120 in. [307.85 mm]  
 HEIGHT: 8.774 in. [222.85 mm]

WEIGHT: 4.5 lbs. (2.04 Kg)

FINISH: SKYDROL RESISTANT POLYURETHANEENAMEL  
 BASE IRIDITE PER MIL-C-5441

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

CONNECTOR: TNC FEMALE  
 (SMA, OR N TYPE IS OPTIONAL)

**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	PARTS LIST	PART NO	REV
4	MOUNTING SCREWS	MS24693C273		5
1	INTERNAL ANTENNA / CABLE	3G1215A-XS-1 / SMA-MR-RG316-3.2in-TNC-FB		4
1	CHOKE RING ADAPTER	12G1215P001-B4		3
1	CHOKE RING / PLUGS	12G1215P001-B3 / 85985K12		2
1	RADDME	12G1215-R-6		1
-2				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMAL ANGLES ± 1/64 FRACTIONS ± 1/64 DECIMAL ANGLES ± 1/64

TOLERANCE DIM PER ASH 114.6

REMOVE ALL BURRS

BREAK INTERNAL EDGES 0.005 TO .015

PLEASE PRINT DIMENSIONS ON ALL DIMENSIONS

SAVE ON A COMPACT DISK

MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

OUTLINE DRAWING  
 ACTIVE L1/L2 CHOKE RING  
 GPS ANTENNA

APPROVED: S. HUYNH  
 02-08-13

D 3CVE1123GM1215A-XT-1

SCALE 1/1

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas