



ISO 9001:2008/FAA Approved Facility

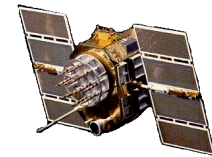
Active L1/L2 GPS Antennas, P/N: 1G1215A-XSC-X

P/N: 1G1215A-XSC-4 (Black)

P/N: 1G1215A-XSC-3 (Green)

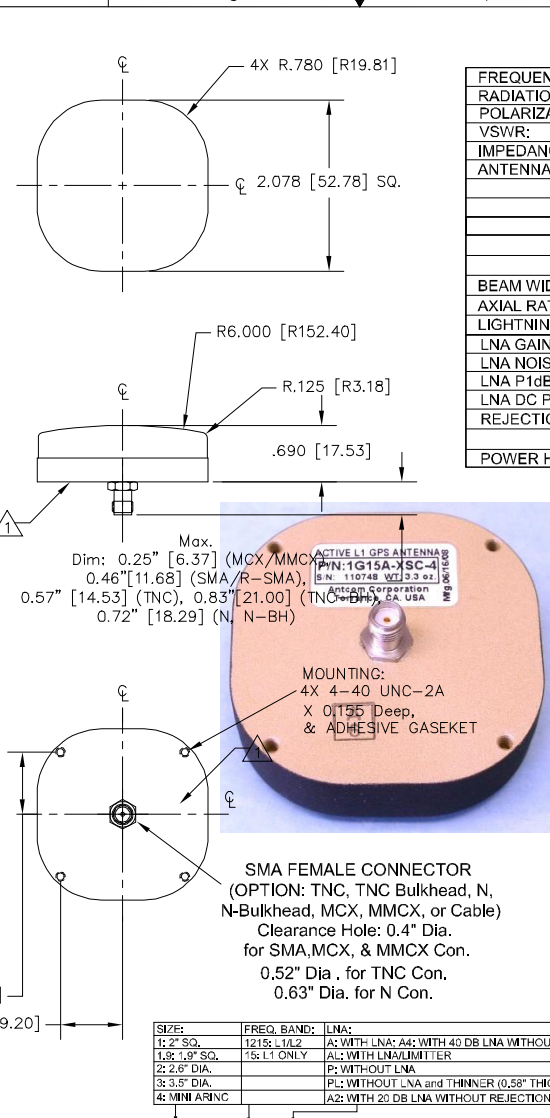
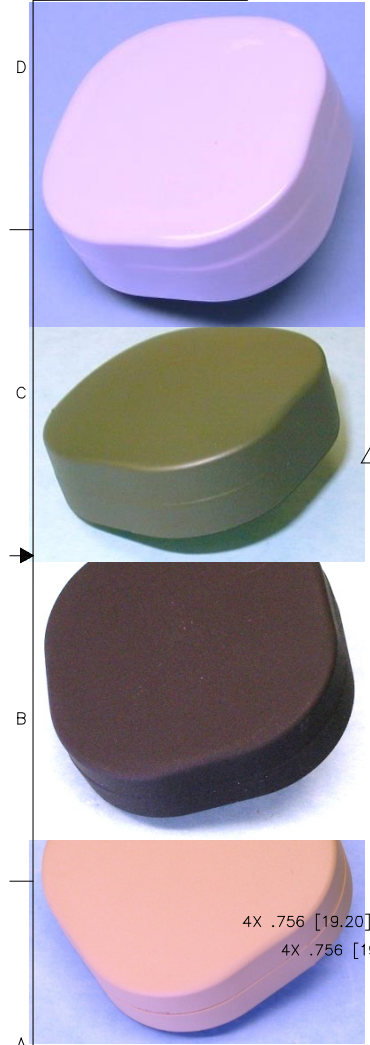
2" Square, Back Mount, Bottom Center Connector Configuration

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



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SPECIFICATIONS

ELECTRICAL:		REVISIONS				
		ZONE	REV	DESCRIPTION	DATE	APPROVED
		B		REVISED COLOR #34088 PER NGC	04/08/13	S.H
FREQUENCY:	L1: (1575.42 ±15) MHz		L2: (1227.60 ±15) MHz			
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP		RHCP			
VSWR:	< 1.5:1		< 1.5:1			
IMPEDANCE:	50 ohms		50 ohms			
ANTENNA GAIN (dBi):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+3.7	+4.7	+3.1	-1.7	+3.3	+4.5
@ 10 ° Elevation:	-2.9	-1.8	-1.9	-7.3	-3.8	-3.5
@ 20 ° Elevation:	-1.3	-0.3	+0.6	-6.2	-2.0	-0.8
@ 30 ° Elevation:	0.0	+1.4	+1.7	-5.2	-0.5	+1.4
@ 60 - 90 ° Elevation:	> 3.0	> 3.9	> 2.4	> -3.2	> 2.7	> 2.2
BEAM WIDTH (3dB):	108 Deg.	114 Deg.	143 Deg.	100 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB		2 dB			
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN:	33 dB		35 dB			
LNA NOISE FIGURE:	3.0 dB		3.0 dB			
LNA P1dB Out:	+13 dBm		+13 dBm			
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA					
REJECTION @ (-50/+50) MHz	> -41 dB / -59 dB		> -40 dB / -40 dB			
@ (-100/+100) MHz	> -65 dB		> -65 dB			
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)					

MECHANICAL:

SIZE: LENGTH: 2.080 in. [52.78 mm], WIDTH: 2.080 in. [52.78 mm]
 HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 3.1 oz. (87.9 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441, With Radome matching color

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

CONNECTOR: SMA FEMALE
 (OPTION: TNC, TNC-Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)

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

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215; L1/L2	A: WITH LNA; A4; WITH 40 DB LNA WITHOUT REJECTION FILTERS
1.9: 1.9" SQ.	L1 ONLY	AL: WITH LNA/LIMITER
2: 2.6" DIA.		P: WITH-OUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA and THINNER (0.58" THICK)
4: MINI ARINC		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

QUANTITY REQD.	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	TRM NO.
1	ADHESIVE GASKET	12345G-3M-1G	-	-	-	1

1. 032 BRUSH FINISH ON SURFACE INDICATED
2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
- NOTES: UNLESS OTHERWISE SPECIFIED:

P/N: 1G1215A-XSC-3

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	RSC: R-SMA; SC: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N; NO MAG.	M/C: MCX; MMCX; PC: PC; PINS	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
R: CABLE LENGTH (IN)	NC: NBS; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34088 PER FED-STD-595B
R: RIGHT ANGLE CON.	TC: TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: TAN #1; FS 23446 or 33446, FED-STD-595

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .002 .005 ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BEVEL EXTERNAL EDGES .002 TO .010
SMOOTH THREADS PER UNF-2-8879
DRYS ON A COARSE GRIT
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

Center Connector
 2in Square Active
 L1/L2 GPS Antenna

DRAWN BY: S. HUYNH
 APRIL-08-13

DESIGNED BY: S. HUYNH
 APRIL-08-13

UPDATED BY: S. HUYNH
 AUG-01-16

DATE DRAWN: P. TRAN
 AUG-01-16

APPROVED BY: S. HUYNH
 AUG-01-16

DRAWING NO: D3CVE11
 PART NO: 1G1215A-XXC-X
 SCALE: 1/1
 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas