Active or Passive L1/L2 GPS Antennas, P/N: 4G1215X-XX-X:
(3.4” x 2.2”) Mini Arinc Configurations

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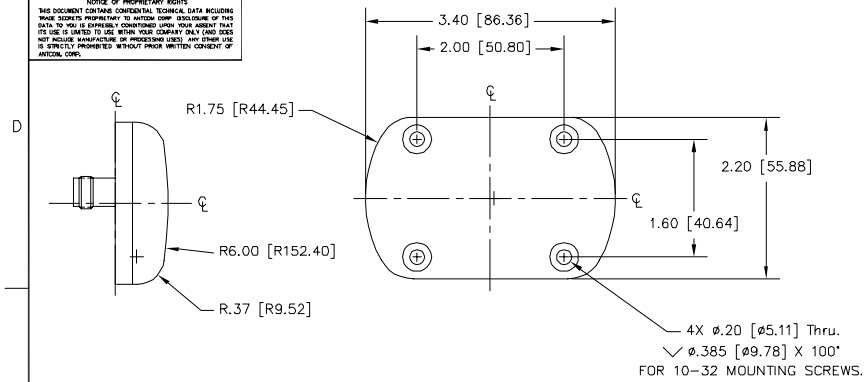

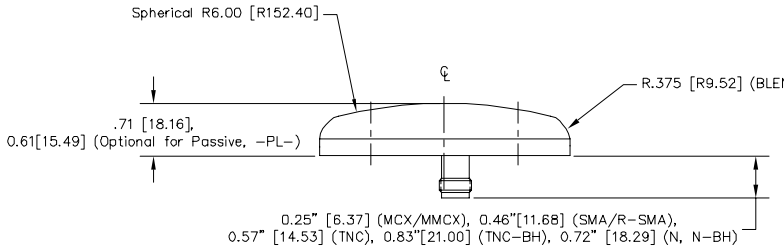

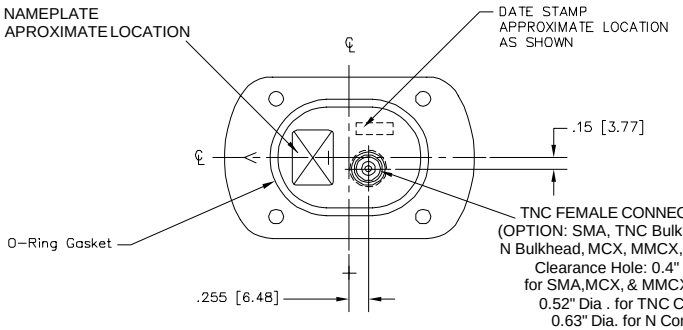

SPECIFICATIONS

ELECTRICAL:

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 (dBic):	Free Space	16 in G.P.	4 ft G.P.	Free Space	16 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.6	+ 0.3	+ 2.9	+ 1.8	+ 1.9	+ 5.3
@ 10 ° Elevation:	- 2.5	- 3.1	- 1.8	- 4.2	- 3.1	- 2.3
@ 20 ° Elevation:	- 1.1	- 1.1	+ 0.7	- 2.9	- 1.1	+ 0.4
@ 30 ° Elevation:	+ 0.5	+ 0.9	+ 1.7	- 2.0	+ 0.5	+ 2.3
@ 60 - 90 ° Elevation:	> 3.6	+ 3.1/+ 0.3	> 2.1	> 0.9	+ 3.1/+ 1.9	> 3.2
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.	108 Deg.	120 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:	WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm], HEIGHT: 0.72 in. [18.16 mm], 0.61" [15.49] (Optional for Passive)
WEIGHT:	5.15 oz. (146 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	TNC FEMALE (OPTION: SMA, 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

QUANTITY REQD		PARTS LIST			
		DESCRIPTION	PART NO	FINISH	ITEM NO
1		O-RING	2-031/N756-75	-	1
A/R	-				
				-	3
4	-	MOUNTING SCREW: (10-32, 1")	MS24693C276		4
4	-	MOUNTING SCREWS for -PL- ONLY: (10-32, 3/4")	MS24693C274	-	5

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.	15: L1 ONLY	AL: WITH LNA/LIMITTER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA and THINNER (HEIGHT = 0.61")
4: MINI ARINC		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

P/N: 4G1215A-XT-1

CABLE'S LENGTH :	CONNECTOR :	COLOR :
X: NO CABLE	S: SMA; RS:R-SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG., N: NO MAG .	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN.)	N, NB: N, N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. O-RING, AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING
L1/L2 ACTIVE, OR PASSIVE
GPS ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 4G1215X-XX-X | REV -

SCALE 1/1 | SHEET 1 OF 1

DO NOT SCALE DRAWING