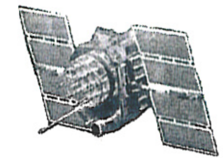
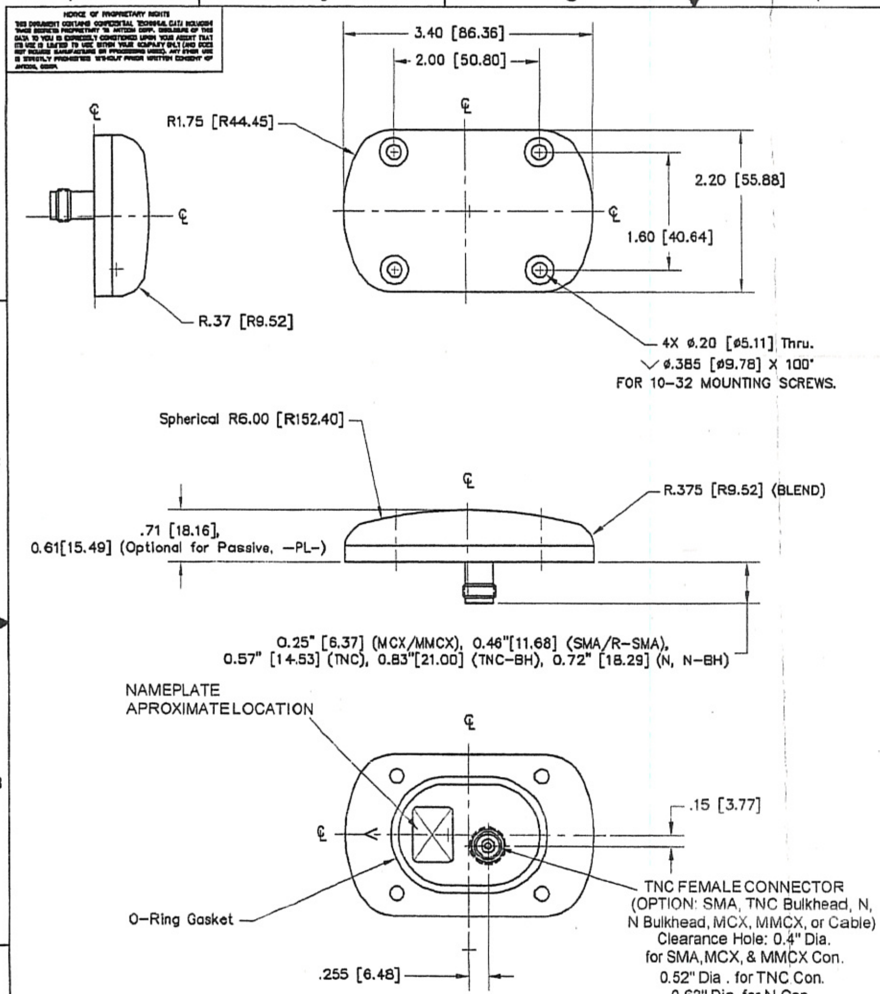
Active L1 GPS Antenna, P/N: 4G15A-XX-X:
(3.4" x 2.2") Mini Arinc Configuration



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

CONTROLLED DOCUMENTS



SPECIFICATIONS

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	NEW ADHESIVE	7/30/04	S.H

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz		
RADIATION PATTERN:	HEMISPHERICAL		
POLARIZATION:	RHCP		
VSWR:	< 1.5:1		
IMPEDANCE:	50 ohms		
ANTENNA GAIN (dBic):	Free Space	16 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.6	+ 0.3	+ 2.9
@ 10 ° Elevation:	- 2.5	- 3.1	- 1.8
@ 20 ° Elevation:	- 1.1	- 1.1	+ 0.7
@ 30 ° Elevation:	+ 0.5	+ 0.9	+ 1.7
@ 60 - 90° Elevation:	> 3.6	+3.1/+0.3	> 2.1
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.
AXIAL RATIO:	2 dB		
LIGHTNING PROTECTION:	DC GROUNDING		
LNA GAIN:	33 dB		
LNA NOISE FIGURE:	2.2 dB		
LNA P1dB Out:	+13 dBm		
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/<30mA		
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB		
@ (-100/+100) MHz	< -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: 0.71 in. [18.16 mm], 0.61" [15.49] (Optional for Passive)

WEIGHT: 5.15 oz. (146g)

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		DESCRIPTION	PART NO	FINISH	ITEM NO
4	–	MOUNTING SCREWS for –PL– ONLY: (10–32, 3/4")	MS24693C274	–	5
4	–	MOUNTING SCREW: (10–32, 1")	MS24693C276	–	4
				–	3
1		O–RING	2–031/N756–75	–	1

PARTS LIST

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A: WITH 33 dB LNA, A2: WITH 20 dB LNA, A4: WITH 40 dB LNA
1.9: 1.9" SQ.	15: L1 ONLY	
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		
4: MINI ARINC		

P/N: 4G15A-XT-1

CABLE'S LENGTH:	FEMALE 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

NOTES: UNLESS OTHERWISE SPECIFIED:

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
DRAWN: M. BOAS July-30-04
APPROVED: S. HUYNH July-30-04
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING
L1 ACTIVE
GPS ANTENNA

SIZE D | 3CVE1 | 4G15A–XT–1 | REV A
SCALE 1/1 | SHEET 1 OF 1