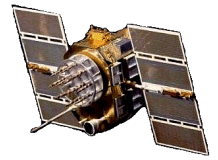




# DAGR's Remote Antenna 2 (RA-2), P/N: 4G1215A-XTBC-3

L3's P/N: 7190427+001 (4G1215A27-XTBC-3)

## (3.4" x 2.2") Mini Arinc Center Connector Configurations



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>

**NOTICE OF PROPRIETARY RIGHTS**  
THIS DOCUMENT CONTAINS CONFIDENTIAL, TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU, IN WHATEVER MANNER, WITHOUT YOUR WRITTEN CONSENT FOR USE, REPRODUCTION, OR REPRODUCTION OF THIS DATA, OR FOR THE NOT BEING MANUFACTURED OR PROVIDED HEREIN. ANY OTHER USE IS EXPRESSLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

TNC BULKHEAD CONNECTOR (OPTION: TNC, SMA, N, N Bulkhead, MCX, MMCX, or Cable)  
Clearance Hole: 0.4" Dia. for SMA, MCX, & MMCX Con. 0.52" Dia. for TNC Con. 0.63" Dia. for N Con.

NAMEPLATE APPROXIMATE LOCATION

**SPECIFICATIONS**

**ELECTRICAL:**

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:		HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 2:1	< 2:1
IMPEDANCE:	50 ohms	50 ohms
ANTENNA GAIN (dBic):	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 +2.0 +3.1/+1.9
BEAM WIDTH (3dB):	103 Deg.	120 Deg.
AXIAL RATIO:	120 Deg.	146 Deg.
LIGHTNING PROTECTION:	108 Deg.	120 Deg.
DC GROUNDING:	74 Deg.	
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, (2.5-24V)/<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-5441F

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

CONNECTOR: TNC FEMALE BULKHEAD (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, DO-228, MIL-C-5541, MIL-E-5400, MIL-L-45208A, MIL-STD-810, AND SAE J1455

QTY	DESCRIPTION	PART NO	FINISH	TEST
1	O-RING	2-031/A756-75	-	3
4	MOUNTING SCREW: (6-32, 1")	91500A153	-	2
4	MOUNTING SCREWS for -PL- ONLY: (6-32, 3/4")	91500A151	-	1

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
C	1	1.66in Mounting Spacing	Dec-01-08	S.H

**REVISIONS**

DATE	BY	DESCRIPTION
01-06-01	S. HUYNH	ORIGINAL DRAWN
01-06-01	S. HUYNH	ORIGINAL DESIGNED
June-02-16	S. HUYNH	UPDATED
June-02-16	P. TRAN	UPDATE DRAWN
June-02-16	S. HUYNH	APPROVED

**ANTCOM CORP.** TORRANCE, CALIFORNIA

OUTLINE DRAWING  
L1/L2 ACTIVE, OR PASSIVE  
GPS ANTENNA

SCALE 1/1 SHEET 1 OF 1

2. O-RING, AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

SIZE:	FREQ. BAND:	LNA:
1: 2" SO.	1215: L1/L2	A1: with +33dB LNA; A2: with 20 dB LNA; A27: with +27 dB LNA
1.9: 1.9" SO.	15: L1 ONLY	A4: with +40 dB LNA; AL: WITH LNA/LIMITER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA AND THINNER (HEIGHT = 0.61")
4: MINI ARINC		

**CABLE'S LENGTH:** C: SMA; R: R-SMA; P: PINS  
M: MAG. N: NO MAG. M: MCX; MM: MMCX  
#R: CABLE LENGTH (IN) N: N; NB: N-Bulkhead  
R: RIGHT ANGLE CON. T: TNC; TB: TNC-Bulkhead

**CONNECTOR:** C: SMA; R: R-SMA; P: PINS  
M: MAG. N: NO MAG. M: MCX; MM: MMCX  
#R: CABLE LENGTH (IN) N: N; NB: N-Bulkhead  
R: RIGHT ANGLE CON. T: TNC; TB: TNC-Bulkhead

**COLOR:**  
-1: GLOSS WHITE #17925 PER FED-STD-595B  
-2: LUSTERLESS GRAY #36320 PER FED-STD-595B  
-3: CAMO GREEN #34094 PER FED-STD-595B  
-4: LUSTERLESS BLACK #37038 PER FED-STD-595B  
-5: DESERT TAN #33446 PER FED-STD-595B

**UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:**  
FRACTIONS: DECIMALS: ANGLES: HOLE POSITION: SURFACE FINISH: MACHINED SURFACES: DO NOT SCALE DRAWING

1: 2" SO. ± 0.005  
1.9: 1.9" SO. ± 0.005  
2: 2.6" DIA. ± 0.005  
3: 3.5" DIA. ± 0.005

RELIEVE ALL SHARP BREAK-EXTERNAL EDGES 0.05 TO 0.15 RADIUS 0.005 TO 0.010  
REMOVE BURRS PER MIL-STD-883B  
MACHINED SURFACES: 125

DO NOT SCALE DRAWING

NMO Connector Option is Now Available for Some Antennas