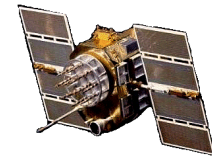




DAGR's Remote Antenna 1 (RA-1), Active L1/L2 GPS Antenna  
 4G1215A-XMNS-3 Rev A  
 (3.4" x 2.2") Side Connector, Mini Arinc Configurations



ISO 9001:2008/FAA Approved Facility Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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**SPECIFICATIONS**

**ELECTRICAL:**

		REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED			
FREQUENCY:	L1: (1575.42 ±15) MHz			L2: (1227.60 ±15) MHz			
RADIATION PATTERN:	HEMISPHERICAL						
POLARIZATION:	RHCP			RHCP			
VSWR:	< 2.0:1			< 2.0:1			
IMPEDANCE:	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):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5	
@ 10° Elevation:	- 2.1	- 1.8	- 1.9	- 5.8	- 3.8	- 3.5	
@ 20° Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8	
@ 30° Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4	
@ 60 - 90° Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2	
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 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:	(2.5 to 24)Vdc @ (30 to 50)mA						
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB			
@ (-100/+100) MHz	< -65 dB			< -65 dB			
POWER HANDLING:	1 Watt CW						

**MECHANICAL:**

SIZE: WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm], HEIGHT: 0.91 in. [23.18 mm]  
 WEIGHT: 7.49 oz. (212.4 g)  
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541  
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT  
 CONNECTOR: SMA FEMALE

**ENVIRONMENTAL:**

TEMPERATURE: OPERATING: -67 °F TO +185 °F [-55 °C TO +85 °C]  
 STORAGE: -71 °F TO +185 °F [-57 °C TO +85 °C]  
 ALTITUDE: 70,000 ft.  
 VIBRATION: > 30 G's  
 LEAKAGE: HERMETICALLY SEALED

**FEDERAL & MILITARY SPECIFICATIONS:**

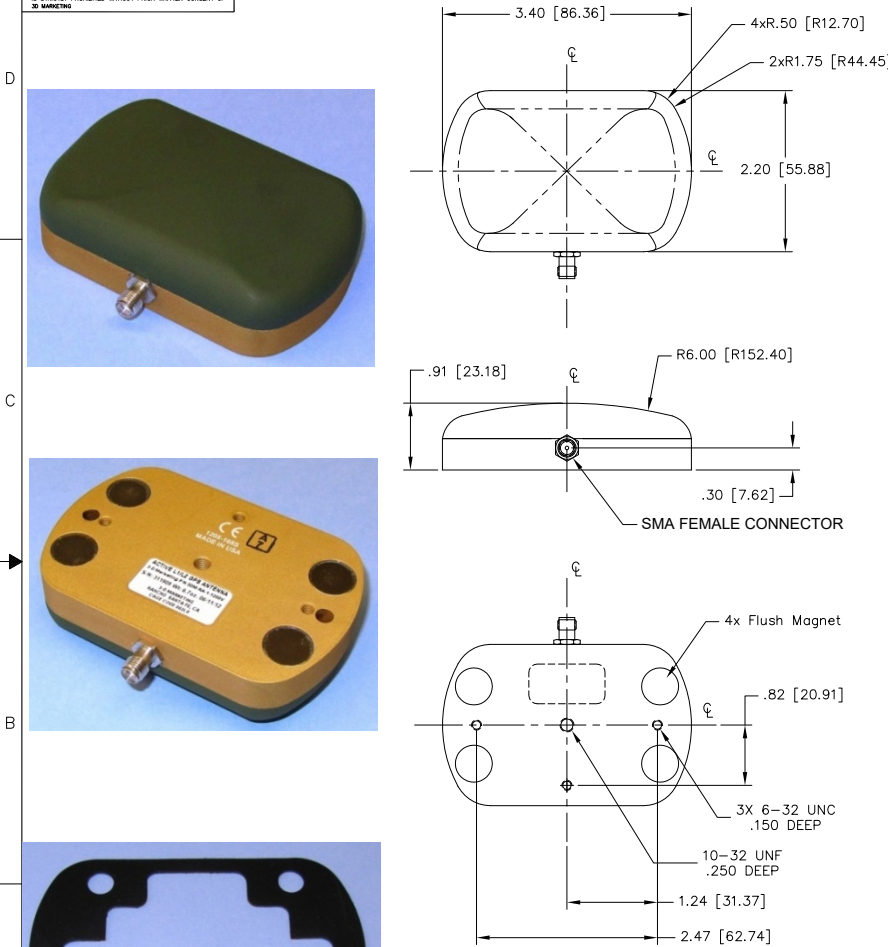
**DESIGN TO:** FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

1	ADHESIVE GASKET	Magnet-Cover - 4G (Item 541-4G)			1
QUANTITY REQD	DESCRIPTION	PART NO.	MATERIAL	FINISH	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		3D Marketing CALIFORNIA	
FRACTIONS DECIMALS ANGLES	± 1/64 ± .005 ± 1°	ORIGINALLY DRAWN S. HUYNH Jun-06-01	ORIGINALLY DESIGNED S. HUYNH Jun-06-01
TOLERANCE SURF PER ANS Y14.5		UPDATE DRAWN PHIL TRAN June-08-12	APPROVED S. HUYNH June-08-12
REMOVE ALL BURRS		DO NOT SCALE DRAWING	SCALE 1/1
BREAK EXTERNAL EDGES .005 TO .015			
FILETS R .005 TO R .030			
SCREEN THREADS PER UNF-2B			
DIA'S ON A COMMON E .0005			
MACHINED SURFACES			



2. ADHESIVE GASKET SUPPLIED BY ANTCOM CORPORATION  
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
 NOTES: UNLESS OTHERWISE SPECIFIED: