

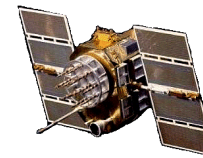


ISO 9001:2008/FAA Approved Facility

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

DAGR's Remote Antenna 1 (RA-1)

Active L1/L2 GPS Antenna, 4G1215A-XMNS-3 Rev A (P/N: 3DM-RA-1-1200V Rev A) (3.4" x 2.2") Side Connector, Mini Arinc Configurations



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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 (dBic):	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

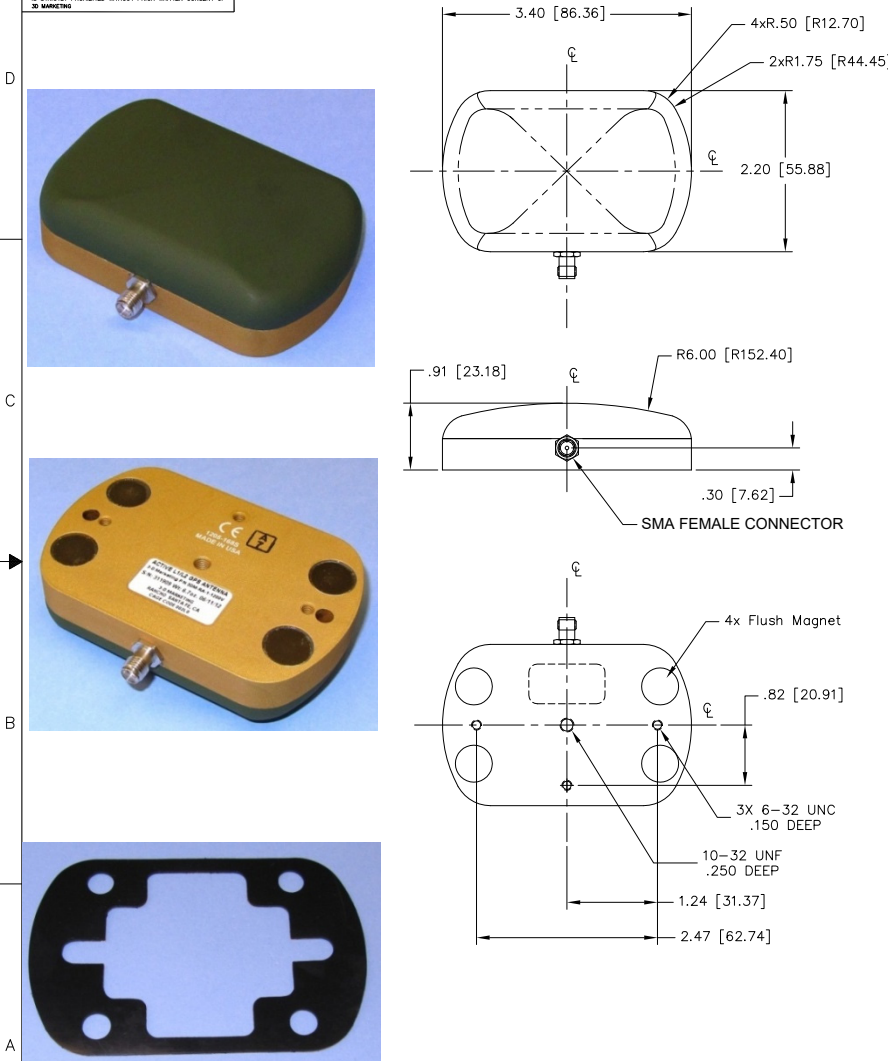
ACCEPTANCE TEST PROCEDURE:

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		FRACTIONS DECIMALS ANGLES	
± 1/64	± .005	± .005	± 1°
TOLERANCE SURF PER ANS Y14.5			
REMOVE ALL BURRS			
BREAK INTERNAL EDGES .005 TO .015			
FILETS R .005 TO R .030			
SCREEN THREADS FOR UN-6-32-18870			
DIA'S ON A COMMON E .0005			
MACHINED SURFACES			
DO NOT SCALE DRAWING			

ORIGINALLY DRAWN	S. HUYNH Jun-06-01	3D Marketing CALIFORNIA OUTLINE DRAWING L1/L2 ACTIVE, OR PASSIVE GPS ANTENNA
ORIGINALLY DESIGNED	S. HUYNH Jun-06-01	
UPDATE DRAWN	PHIL TRAN June-08-12	
APPROVED	S. HUYNH June-08-12	
DWG FILE NO		TITLE: 3DM-RA-1-1200V SCALE: 1/1 SHEET: 1 OF 1



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

NMO Connector Option is Now Available for Some Antennas