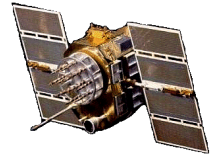


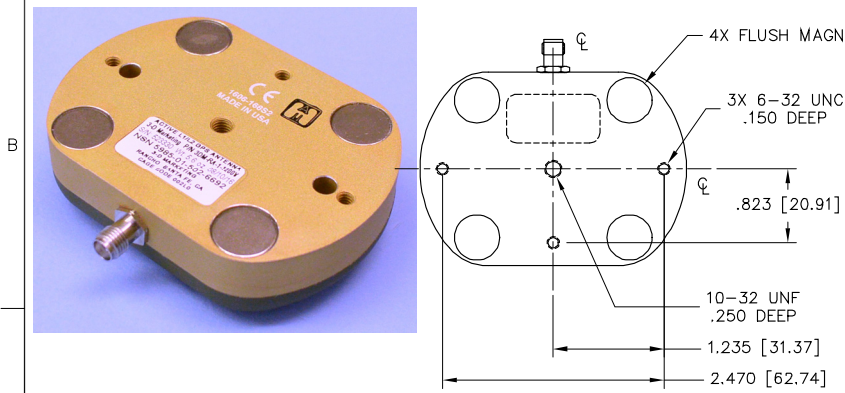
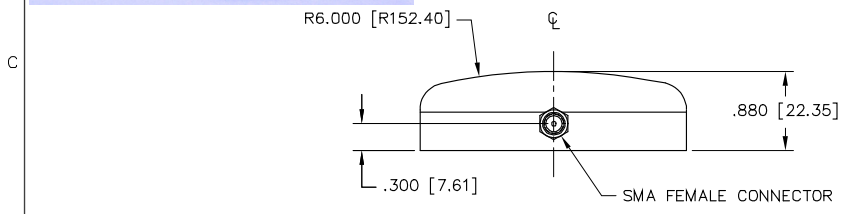
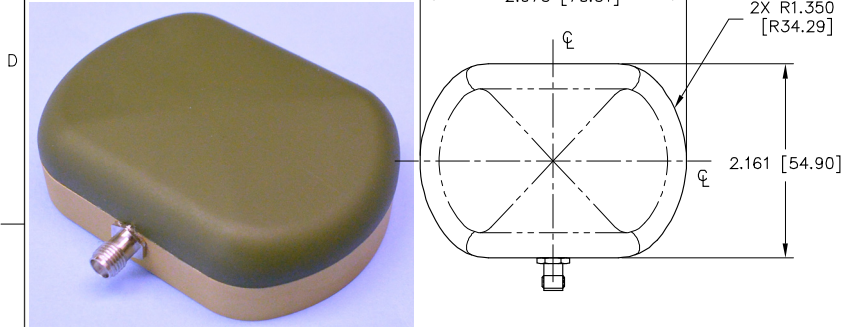


DAGR's Remote Antenna 1 (RA-1), Active L1/L2 GPS Antenna, P/N: 3DM-RA-1-1200V Rev B (2.973" x 2.161") Side Connector, Mini Arinc Configurations



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1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
NOTES: UNLESS OTHERWISE SPECIFIED:

PROPRIETARY

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SPECIFICATIONS

REV		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED
B		SMALLER FOOT PRINT	06/20/16	S.H.

	L1: (1575.42 ±15) MHz			L2: (1227.60 ±15) MHz		
	FREQUENCY:					
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP			RHCP		
VSWR:	< 2.0:1			< 2.0:1		
IMPEDANCE:	50 ohms			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: 2.161 in. [54.90 mm], LENGTH 2.973 in. [75.51 mm], HEIGHT: 0.880 in. [22.34 mm]

WEIGHT: 6.2 oz. (175.7 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F

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

QUANTITY REQD	DESCRIPTION	PART NO.	PARTS LIST	MATERIAL	FINISH	REV
1						1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO DECIMALS ANGLES ± 1/64 .002 .010 .001 ± 1°	ORIGINALLY DRAWN S. HUYNH June-08-12	3D Marketing CALIFORNIA OUTLINE DRAWING L1/L2 ACTIVE, OR PASSIVE GPS ANTENNA
TOLERANCE 5VM PER ANSI Y14.5 REMOVE ALL SHARP BREAK EXTERNAL EDGES .002 TO .010 FILE TO .002 TO .010 SCREW THREADS PER MIL-S-8879 DATS ON A COORDINATE SYSTEM MACHINED SURFACES 125	ORIGINALLY DESIGNED S. HUYNH June-08-12	
DO NOT SCALE DRAWING	UPDATED S. HUYNH June-20-16	
	UPDATE DRAWN P. TRAN June-20-16	
	APPROVED S. HUYNH June-20-16	

DATE	USER	DESIGN BY	REV
D 002L0		3DM-RA-1-1200V	B
SCALE 1/1			SHEET 1 OF 1