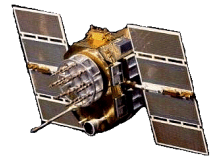




ISO 9001:2008/FAA Approved Facility

DAGR's Remote Antenna 1 (RA-1), Active L1/L2 GPS Antenna  
 P/N: 2DG1215A-MNT-3 Rev B for TNC Connector  
 P/N: 2DG1215A-MNS-3 Rev B for SMA Connector  
 2.6" Diameter, Flat Strong Magnetic (20lbs) Mount Configurations



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>

7  
6  
5  
4  
3  
2  
1

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Ø2.71 [Ø68.81]

R6.00 [R152.40]

.92 [23.48] for TNC, .80 [20.44] for SMA

.82 [20.91]

3x 6-32 UNC-2B x 0.150 Deep For Optional Mounting

4 x Flush Magnets

1.23 [31.37]

2.47 [62.74]

10-32 UNF-2B X 0.250 Deep

SIZE: | FREQ. BAND: | LNA: |  
 1: 2" SO. | 1215: L1/L2 | A: WITH LNA |  
 1.5: 1.5" SO. | 15: L1 ONLY | AL: WITH LNA/LIMITER |  
 2: 2.6" DIA. | P: WITHOUT LNA |  
 3: 3.5" DIA. | A2: WITH 20 LNA WITHOUT REJECTION FILTERS. |  
 4: MINI ARINC | A4: WITH 40 LNA WITHOUT REJECTION FILTERS. |

P/N: 2DG1215A-MNX-X

CABLE'S LENGTH: | CONNECTOR: | COLOR: |  
 X: NO CABLE | S: SMA; RS: R-SMA; P: PINS | -1: GLOSS WHITE #17925 PER FED-STD-595B |  
 MN: FLUSH MAGNET | M: MMCX | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B |  
 R: CABLE LENGTH (IN) | N, NB: N, N-bulkhead | -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B |  
 R: RIGHT ANGLE CON. | T: TNC; TB: TNC-bulkhead | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |

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

### SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	REVISIONS	
				DATE	APPROVED
A		STRONGER MAGNETS	April/10/07	S.H	
B		THICKER BASE FOR TNC	Oct-01-08	S.H	

#### ELECTRICAL:

	L1: (1575.42 ±15) MHz	L2: (1227.60 ±15) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 2.0:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P., 4 ft G.P.
@ 90° (ZENITH):	+ 5.0	+ 4.7, + 3.1
@ 10° Elevation:	- 2.1	- 1.8, - 1.9
@ 20° Elevation:	- 0.6	- 0.3, + 0.6
@ 30° Elevation:	+ 0.9	+ 1.4, + 1.7
@ 60-90° Elevation:	> 4.0	> 3.9, > 2.4
BEAM WIDTH (3dB):	103 Deg.	114 Deg., 143 Deg.
AXIAL RATIO:	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
REJECTION @ (-100/+100) MHz:	< -65 dB	
POWER HANDLING:	1 Watt CW	

#### MECHANICAL:

SIZE: DIAMETER: 2.71 in. [ 68.81 mm]  
 HEIGHT: 0.80 in. [20.44mm] for SMA; 0.92in [23.48mm] for TNC

WEIGHT: 4.00 oz. [113 g] for SMA; 5.40 oz. [153 g] for TNC

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: SMA FEMALE or TNC FEMALE (See Below Part Number)  
 (OPTION: TNC, N, 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

#### ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

QTY	REMARKS	DESCRIPTION	PART NO	MATERIAL	FINISH	THK
1		ADHESIVE GASKET	12345G-3M-2G	-	-	5
1						3
1						2
-2	-1					1

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 FRACTIONS: DECIMALS ARE ANGLES  
 ± 1/64 .002 .010 ± .2°  
 TOLERANCE SURF PER ANS Y14.5  
 HONEYWELL ALL SURF  
 BREAK: EXTERNAL EDGES .005 TO .010  
 SIZE 8 PINS TO 310  
 SIZE 8 PINS PER MIL-C-879  
 DIA'S ON A CIRCLE @ .25 DIA  
 MACHINED SURFACES  
 DO NOT SCALE DRAWING

ORIGINAL DRAWN: S. HUYNH 05-29-01  
 ORIGINAL DESIGNED: S. HUYNH 05-29-01  
 UPDATED: S. HUYNH Aug-28-17  
 UPDATE DRAWN: P. TRAIL Aug-28-17  
 APPROVED: S. HUYNH Aug-28-17

**ANTCOM CORP.** TORRANCE, CALIFORNIA  
 L1/L2 ACTIVE GPS ANTENNA (DAGR Remote Antenna 1, RA-1)  
 D.3C1E1 2DG1215A-MNX-X B  
 SCALE 1/1 SHEET 1 OF 1