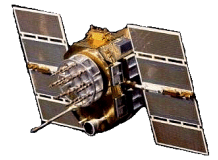




# Active or Passive L1/L2 GPS Antenna, P/N: 2G1215X-XX-X P/N: 2G1215A-XS-2 (P/N: 2G1215A-XSS-2) 2.6" Diameter, Bulkhead/Back Mount Configurations



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>

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**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

**ELECTRICAL:**

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P. 4 ft G.P.
@ 90° ZENITH:	+5.0 +4.7 +3.1	+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	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	
LNA NOISE FIGURE:	3.0 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA	
REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB	
@ (-100/+100) MHz:	< -65 dB	
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)	

**MECHANICAL:**

SIZE: DIAMETER: 2.63 in. [66.80 mm]  
HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)  
4.22 oz. (119 g)

WEIGHT:

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: TNC BULKHEAD  
(OPTION: TNC, SMA, 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, 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	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REF NO
1	ADHESIVE GASKET	123456-3M-2G	-	-	-	5
1	WASHER, LOCK	AN936B816	-	-	-	2
1	HEX NUT, MOUNTING	1/2-20 HEX	-	-	-	1

**UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND DECIMAL FRACTIONS UNLESS OTHERWISE SPECIFIED ANGLES ARE IN DEGREES**

TOLERANCE SHOWN PER ANSI Y14.5

REMOVE ALL BURRS

FILERS TO TO

SCREW THREADS PER MIL-C-8879

FINISHES PER MIL-STD-883C

MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

OUTLINE DRAWING  
L1/L2 ACTIVE or PASSIVE  
GPS ANTENNA

DATE: 01-05-29  
DRAWN: M. BOAS  
CHECKED: S. HUYNH  
APPROVED: 01-05-29

SCALE: 1/1  
SHEET: 1 OF 1

**SIZE:** 1: 2" SQ. 1.25: 1.1/2 1: A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS

**FREQ. BAND:** 1: 1.9" SQ. 15: L1 ONLY

**LNA:** A1: WITH INVERTER; P: WITHOUT LNA; PL: WITHOUT LNA and THINNER (HEIGHT = 0.58"); A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

**CONNECTOR:** S: SMA; RS: R-SMA; P: PINS; M: MCX; N: NO MAG; NI: MMCX; MM: MMCX; R: RIGHT ANGLE CON.

**COLOR:** 1: GLOSS WHITE #17925 PER FED-STD-595B; 2: LUSTERLESS GRAY #36320 PER FED-STD-595B; 3: OLIVE DRAB GREEN #34031 PER FED-STD-595B; 4: LUSTERLESS BLACK #37038 PER FED-STD-595B

**CABLE'S LENGTH:** X: NO CABLE; M: MAG; NI: NO MAG; P: CABLE LENGTH (IN); R: RIGHT ANGLE CON.

**CONNECTOR:** S: SMA; RS: R-SMA; P: PINS; M: MCX; N: NO MAG; NI: MMCX; MM: MMCX; R: RIGHT ANGLE CON.

**COLOR:** 1: GLOSS WHITE #17925 PER FED-STD-595B; 2: LUSTERLESS GRAY #36320 PER FED-STD-595B; 3: OLIVE DRAB GREEN #34031 PER FED-STD-595B; 4: LUSTERLESS BLACK #37038 PER FED-STD-595B

**ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION**

**MOUNTING HEX NUT AND LOCK WASHER ARE SUPPLIED BY ANTCOM CORPORATION**

**DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]**

**NOTES: UNLESS OTHERWISE SPECIFIED:**

3. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION

2. MOUNTING HEX NUT AND LOCK WASHER ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

P/N: 2G1215A-XTB-1

NMO Connector Option is Now Available for Some Antennas