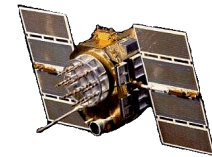




# Active or Passive L1/L2 GPS Antennas, P/N: 1G1215A-XRS-X

## 2.0" Square, Right Angle SMA, Back Mount Configurations



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

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2.078 [52.78] SQ.  
SPHERICAL R6.000 [R152.40]  
R.125 [R3.18]  
0.58 [14.73] (Optional for Passive), -PL  
0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)  
MOUNTING:  
4X 4-40 UNF-2A  
X 0.155 Deep,  
& ADHESIVE GASEKET  
4X .756 [19.20]  
4X .756 [19.20]  
.255 [6.48]  
.149 [3.78]  
RIGHT ANGLE SMA FEMALE CONNECTOR  
(OPTION: TNC, TNC Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)  
0.4" Dia Clearance Hole for SMA, MCX, MMCX Con.  
0.52" Dia Clearance Hole for TNC Con.  
0.63" Dia Clearance Hole for N Con.

SIZE : FREQ. BAND : LNA :

1: 2" SQ	1215: L1/L2	A: WITH LNA
1.9-1.9" SQ	15: L1 ONLY	AL: WITH LNALIMITER
2: 2" DIA		P: WITHOUT LNA
3: 3.5" DIA		PL: WITHOUT LNA and THINNER (0.58" THICK)
4: MINI ARINC		

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

**P/N: 1G1215A-XRS-4**

CABLES LENGTH :	CONNECTOR :	COLOR :
X: NO CABLE	S: SMA, RS, R-SMA, P-PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAC, N: NO MAC	M: MMCX, MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
F: CABLE LENGTH (IN)	N: NIB, N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

**SPECIFICATIONS**

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P.
@ 90 ° (ZENITH):	+3.7	+4.7
@ 10 ° Elevation:	-2.9	-1.8
@ 20 ° Elevation:	-1.3	-0.3
@ 30 ° Elevation:	0.0	+1.4
@ 60 - 90 ° Elevation:	> 3.9	> 2.4
BEAM WIDTH (3dB):	108 Deg.	114 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:	2.5V/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 (PL)	

**MECHANICAL:**

SIZE: LENGTH: 2.080 in. [52.78 mm], WIDTH: 2.080 in. [52.78 mm]  
HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 2.88 oz. (82 g)

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: RIGHT ANGLE SMA FEMALE  
(OPTION: TNC, TNC-Bulkhead, 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 ID
1	ADHESIVE GASKET	12345G-3M-1G				5
1						3
1						2
1						1
-2						1

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
FRACTIONS DECIMALS ANGLES  
± 1/64 .005 .010 ± 1°  
TOLERANCE 5/16 PER ANSI Y14.5  
REMOVE ALL BURRS  
BREAK EXTERNAL EDGES .005 TO .015  
FALLS TO .002 IN R .002  
SHOW THE DEC PER MIL-S-8879  
DAYS ON A COMMON 1/2"  
MACHINED SURFACES 1/2"  
DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA  
OUTLINE DRAWING  
L1/L2 ACTIVE or PASSIVE  
GPS ANTENNA  
D3CVE11 1G1215A-XRS-X A  
SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas