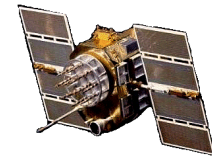




# Active or Passive L1/L2 GPS Antenna, P/N: 1.2G1215X-XS-5-256 Rev D

## (Improved Gain) 1.2" Square, Back Connector 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>

Max. Dim: 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)

SIZE:      FREQ. BAND:      LNA:

1: 2" SQ.      1215: L1/L2      A2: WITH 20 dB LNA

1.9: 1.9" SQ.      15: L1 ONLY      A4: WITH 40 dB LNA

2: 2.6" DIA.      P: WITHOUT LNA

3: 3.5" DIA.

4: MINI ARINC

P/N: 1.2G1215A2-XS-5-256

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; RS: R-SMA; P: PINS; M: MCX;	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: NO MAG.	MM: MMCX; SMB; SSMA; SSMB; SSMC;	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	SSMP: T: TB; TNC; TNC-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	SMP: SMP FEMALE; SSMP: SMP MALE	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	L-RM: Right Angle Male Lemo	-5: TAN #33446 PER FED-STD-595B

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

### 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	50 ohms
ANTENNA GAIN (dBic):	Free Space    3 in G.P.	Free Space    3 in G.P.
@ 90° (ZENITH):	-0.8    +3.8	-3.7    +2.7
@ 10° Elevation:	-9.3    -4.3	-9.9    -6.3
@ 20° Elevation:	-6.8    -2.2	-9.2    -4.2
@ 30° Elevation:	-5.2    -0.7	-7.8    -2.4
@ 60 - 90° Elevation:	> -2.1    > 2.5	> -4.7    > 1.3
BEAM WIDTH (3dB):	100 Deg.    120 Deg.	100 Deg.    90 Deg.
AXIAL RATIO:	2.5 dB	
LIGHTNING PROTECTION:	DC GROUNDING	

**LNA OPTION:**

LNA GAIN: 24.0 dB  
LNA NOISE FIGURE: 1.8 dB  
LNA P 1dB Out: +16 dBm  
VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

**MECHANICAL:**

SIZE: 1.250 in. [31.75 mm] SQ.  
HEIGHT: 0.547 in. [13.89 mm]

WEIGHT: 1.4 oz. (39.2 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5441

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, ABRASION, UV, SOLVENT,  
SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: 4.5" LONG FLEXIBLE CABLE WITH RIGHT ANGLE MMCX  
(OPTION: MCX, SMA, SMB, SSMA, SSMB, SSMC  
SMP, OR TNC)

**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, DO-228, MIL-C-5541,  
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

1	ADHESIVE GASKET	12345G-3M-1.2G	-	-	-	2	
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
QUANTITY REQD      PARTS LIST							

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
FRACTIONS      DECIMALS      ANGLES  
± 1/64      ± 0.015      ± 1°  
XXX ± .005

TOLERANCE 5MM PER ANSI Y14.5  
S: HUYNH

REMOVE ALL SURFS  
BREAK TO TOTAL EDGES .000 TO .010  
FILES TO .000 TO # 300  
SCREW THREADS PER MIL-S-8879  
DAYS ON A COAST: 1/2/005  
MACHINED SURFACE 1/2

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING  
L1/L2 ACTIVE or PASSIVE  
GPS ANTENNA

REV      DATE      BY      CHK

D    3CVE1    1.2G1215A2-XS-5-256    M

SCALE 1/1      SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas