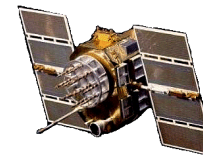




# Active or Passive L1/L2 GPS Antenna, P/N: 1.2G1215X-XS-X-NF Rev D

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



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

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### SPECIFICATIONS

REV		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		3dB More In Gain	Sep-21-06	S.H
C		Connector Flange Thickness	Mar-19-09	S.H
D		Update Baseplate to Rev F	Oct-23-17	R.R.

### ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	< 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 3	
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-5441F  
 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, SSMC, OR TNC)

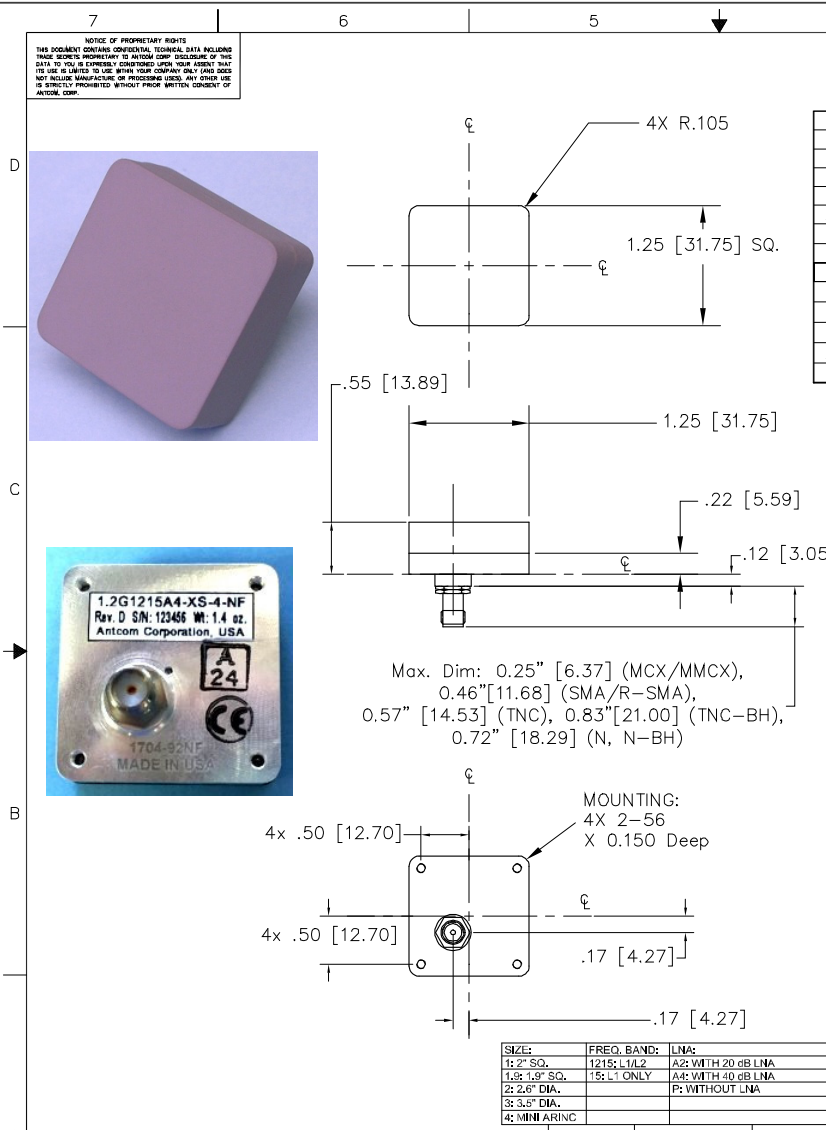
### ENVIRONMENTAL:

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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L-1L2-100



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)

MOUNTING:  
 4X 2-56  
 X 0.150 Deep

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215; L1/L2	A2: WITH 20 dB LNA
1.5: 1.5" SQ.	15: L1 ONLY	A4: WITH 40 dB LNA
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		
4: MINI AIRINC		

P/N: 1.2G1215A2-XS-X-NF

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: MAC; N: NO MAC.	MM: V-MCX; SMB: SSMA; SSMC, SSMC;	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
FF: CABLE LENGTH (IN)	SSMP: T, TB; TNC; TNC-Bulkhead	-3: OLIVE DRAB GREEN #34034 PER FED-STD-595B
RG: RIGHT ANGLE CON.	L-RMC: Right Angle Male Lemo	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

QUANTITY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
5						
1	ADHESIVE GASKET	123456-3M-1.20				3
1						2
1						1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO THIRDS ARE ANGLES ± 1/64 .002 .005 ± .1"

TOLERANCE SURF PER ANSI Y14.5 REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .015 SREW HEADS PER MIL-S-8879 DIA'S OR A COMMON 1/2" DIA. MACHINED SURFACES V

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING L1/L2 ACTIVE OR PASSIVE GPS ANTENNA

DATE: 10/23/17  
 DRAWN: S. HUYNH  
 CHECKED: S. HUYNH  
 DESIGNED: P. TRAN  
 APPROVED: R. ROA

REV: 30VE1 1.2G1215X-XS-X-NF

SCALE: 1/1 SHEET 1 OF 1

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

NMO Connector Option is Now Available for Some Antennas