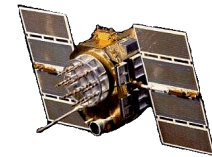




# Active or Passive L1/L2 GPS Antenna, P/N: 1.2G1215X-4.5MM-X Rev B

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

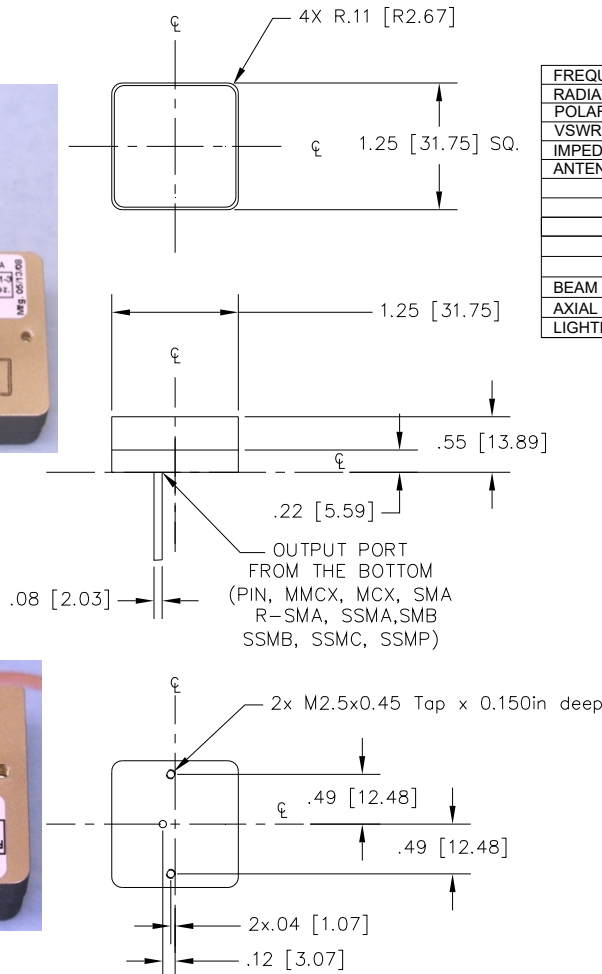
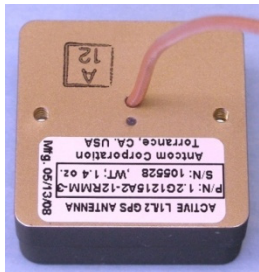
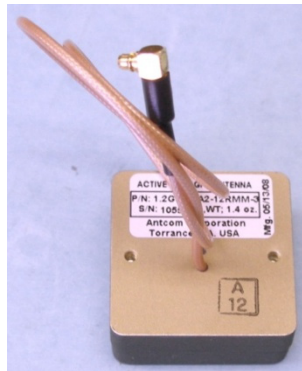


ISO 9001:2008/FAA Approved Facility

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>

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### SPECIFICATIONS

#### ELECTRICAL:

		REVISIONS			
ZONE	REV	DESCRIPTION	DATE	APPROVED	
A		3dB More in Gain	Sep-21-06	S.H	
B		No mounting Flange	Feb-08	S.H	

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz		
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: 1.29 oz. (36.6 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, SSMC, 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, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

#### ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

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: 1.2G1215A2-4.5MM-4**

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; SSMC, 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.	L-RM: Right Angle Male Lemo	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

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

QUANTITY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	12345G-3M-1.2G	-	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	FRACIONS: DECIMALS: ANGLES
± 1/64 .001 ± 1°	± .005 ± .01

APPROVED	DATE	DESIGNED	DATE	DESIGNED	DATE	DESIGNED	DATE
S. HUYNH	Aug-22-13	S. HUYNH	Aug-11-05	P. TRAN	Aug-22-13	S. HUYNH	Aug-22-13

<b>ANTCOM CORP.</b> TORRANCE, CA, CALIFORNIA	
OUTLINE DRAWING	
L1/L2 ACTIVE or PASSIVE GPS ANTENNA	
DWG NO: D13CVE1	REV: B
SCALE: 1/1	SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas