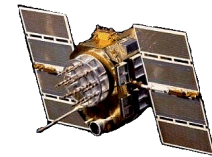




# Active or Passive L1/L2 GPS Antennas

P/N: 4G1215X-XXC-X

## (3.4" x 2.2") Mini Arinc Center 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>

**NOTICE OF PROPRIETARY RIGHTS**  
THIS DOCUMENT CONTAINS CONFIDENTIAL, TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU, OR OTHERS, COMPROMISES YOUR ABILITY TO USE THE INFORMATION HEREIN TO YOUR ADVANTAGE. ANY USE OF THIS INFORMATION IN ANY MANNER WITHOUT YOUR COMPANY'S WRITTEN CONSENT IS EXPRESSLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
A	1.00	1.60in Mounting Spacing VSWR: 2.0	Nov-11-08	S.H

4xR.50 [R12.70]  
2xR1.75 [R44.45]

3.40 [86.36]  
2.00 [50.80]

1.60 [40.64]

2.20 [55.88]

4xø.14 [ø3.56] Thru.  
ø0.31 [7.9] X 82"  
for 6-32 Mounting Screws

R6.00 [R152.40]

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)

0-Ring

TNC FEMALE CONNECTOR  
(OPTION: SMA, N, N Bulkhead,  
MCX, MMCX, or Cable)  
Clearance Hole: 0.4" Dia.  
for SMA, MCX, & MMCX Con.  
0.52" Dia. for TNC Con.  
0.63" Dia. for N Con.

NAMEPLATE  
APPROXIMATE LOCATION

**SPECIFICATIONS**

**ELECTRICAL:**

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 2:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space 16 In G.P.	4 ft G.P. Free Space 16 In G.P. 4 ft G.P.
@ 90° (ZENITH):	+4.6 +0.3 +2.9	+1.8 +1.9 +5.3
@ 10° Elevation:	-2.5 -3.1 -1.8	-4.2 -3.1 -2.3
@ 20° Elevation:	-1.1 -1.1 +0.7	-2.9 -1.1 +0.4
@ 30° Elevation:	+0.5 +0.9 +1.7	-2.0 +0.5 +2.3
@ 60-90° Elevation:	> 3.6 +3.1/+0.3	> 2.1 > 0.9 +3.1/+1.9 > 3.2
BEAM WIDTH (3dB):	103 Deg. 120 Deg. 146 Deg.	108 Deg. 120 Deg. 74 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, (2.5-24V)/<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: WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm], HEIGHT: 0.72 in. [18.16 mm], 0.61" [15.49] (Optional for Passive)

WEIGHT: 5.15 oz. (146 g)

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

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

CONNECTOR: TNC FEMALE (OPTION: SMA, 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, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1155

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A1: with +33dB LNA; A2: with 20 dB LNA; A27: with +27 dB LNA
1.5: 1.9" SQ.	15: L1 ONLY	A4: with +40 dB LNA; AL: WITH LNA/LIMITER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA AND THINNER (HEIGHT = 0.61")
4: MINI ARINC		

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	TEST
1	0-RING	2-031/A756-75	-	3
4	MOUNTING SCREW: (6-32, 1")	91500A153	-	2
4	MOUNTING SCREWS for -PL- ONLY: (6-32, 3/4")	91500A151	-	1

**P/N: 4G1215A-XTC-3**

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; RS: R-SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N NO MAG.	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#F: CABLE LENGTH (IN)	N: N; NB: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: DESERT TAN #33446 PER FED-STD-595B

2. O-RING, AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

**ANTCOM CORP.** TORRANCE, CALIFORNIA

OUTLINE DRAWING  
L1/L2 ACTIVE, OR PASSIVE  
GPS ANTENNA

REV: 1  
DATE: 11 JUN 2016  
BY: P. TRAN  
CHECKED: S. HUYNH  
DATE: 02 JUN 2016

SCALE: 1/1

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas