



FAA Approved Facility

RHCP/LHCP L1/L2 GPS Antennas, P/N: 2G1215XJ2-XS-X
 Dual Linear (V/H) L1/L2 GPS Antennas, P/N: 2G1215XVH-XS-X
 2.6" Diameter, Bulkhead/Back Mount Configurations

Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

NOTICE OF PROPRIETARY RIGHTS
 THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. UNLESS OTHERWISE STATED IN THIS DOCUMENT, ALL RIGHTS ARE RESERVED. ANY REPRODUCTION OR DISSEMINATION OF THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF ANTCOM CORP. IS STRICTLY PROHIBITED.

Ø2.600 [Ø66.04]

SPHERICAL R6.000 [R152.40]

R.375 [R9.52]

0.57" [14.53] (TNC), 0.72" [18.29] (N, N-Bulkhead)
 0.357" [9.07] (SMA), 0.83" [21.00] (TNC-Bulkhead)
 0.200" [5.08] (MCX)

1.630 [41.41]

1.630 [41.41]

0.815 [20.70]

Optional Mounting:
 4X 6-32 UNC-2B, 0.160" Deep,
 ADHESIVE GASKET

0.690 [17.53]

0.149 [3.78]

0.255 [6.48]

0.255 [6.48]

SMA FEMALE CONNECTOR (BLUE, LHCP)
 (OPTIONAL: PINS, TNC, MCX, MMCX, OR CABLES)

SMA FEMALE CONNECTOR (RED, RHCP)
 (OPTIONAL: PINS, TNC, MCX, MMCX, OR CABLES)

3. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION
 2. MOUNTING HEX NUT AND LOCK WASHER ARE SUPPLIED BY ANTCOM CORPORATION
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
 NOTES: UNLESS OTHERWISE SPECIFIED:

SPECIFICATIONS

	REVISIONS					
	ZONE	REV	DESCRIPTION	DATE	APPROVED	
ELECTRICAL:						
FREQUENCY:	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz		
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP/LHCP			RHCP/LHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBi):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90° (ZENITH):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5
@ 10° Elevation:	- 2.1	- 1.8	- 1.9	- 5.8	- 3.8	- 3.5
@ 20° Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30° Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
@ 60 - 90° Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB					
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN OPTION:	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			-40 dB / -40 dB		
@ (-100/+100) MHz:	< -65 dB					
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)					
MECHANICAL:						
SIZE:	DIAMETER: 2.60 in. [66.04 mm] HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)					
WEIGHT:	4.00 oz. (113 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:	SMA FEMALE (OPTION: TNC, SMA, N, TNC & 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-180D, 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
1	ADHESIVE GASKET	123456-3M-2G	-	-	-	3
1	WASHER, LOCK	AN936B816	-	-	-	2
1	HEX NUT, MOUNTING	1/2-20 HEX	-	-	-	1
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH

P/N: 2G1215PJ2-XS-1

SIZE	FREQ. BAND	LNA
1: 2" SQ.	1215: L1/L2	A: WITH LNA
1.9: 1.9" SQ.	15: L1 ONLY	AL: WITH LNA/EMITTER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA and THINNER (HEIGHT = 0.58")
4: MINI ARINC		

CABLES LENGTH :	CONNECTOR :	COLOR :
K: NO CABLE	S: SMA, P: PINS	-1: GLOSS, WHITE #17925 PER FED-STD-595B
M: MAG. NI: NO MAG.	M: MCX, MM: MMCX	2: LUSTERLESS GRAY #36320 PER FED-STD-595B
N: CABLE LENGTH (IN)	N, NB, 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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ± 1/64 FRACTIONS ± 0.005 DECIMALS ± 0.005 ANGLES ± 1° TOLERANCE EVEN PER ANSI Y14.5 REMOVE ALL BURRS BREAK SHARP EDGES AND TO .015 FILLETS R3 TO R1.250 PER ASME Y14.5 DATE ON A COUPON & 2009 MACHINED SURFACES DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING
 L1/L2 ACTIVE or PASSIVE
 RHCP/LHCP GPS ANTENNA

D 3CVE1 2G1215XJ2-XX-X

SCALE 1/1 SHEET 1 OF 1

http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf (Amplifiers/Power Divider/Combiner/Filters)

CC: 3CVE1, NAICS: 334511, S.H, 6/10/2014

Antcom's Proprietary

12 of 21