



FAA Approved Facility

RHCP/LHCP L1/L2GPS Antenna P/N: 1G1215RL-PP-XS-X RevA
Dual Linear (V/H) L1/L2GPS Antenna P/N: 1G1215VH-PP-XS-X RevA
2" Square Configurations with Back Mounting Option

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>

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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP/LHCP	RHCP/LHCP
VSWR:	< 1.5:1	
IMPEDANCE:	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):	+3.7 +4.7 +3.1	-1.7 +3.3 +4.5
@ 10° Elevation:	-2.9 -1.8 -1.9	-7.3 -3.8 -3.5
@ 20° Elevation:	-1.3 -0.3 +0.6	-6.2 -2.0 -0.8
@ 30° Elevation:	0.0 +1.4 +1.7	-5.2 -0.5 +1.4
@ 60-90° Elevation:	> 3.0 > 3.9 > 2.4	> -3.2 > 2.7 > 2.2
BEAM WIDTH(3dB):	108 Deg. 114 Deg. 143 Deg.	100 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, (2.5-24)V/<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: LENGTH: 2.080 in. [52.78 mm], WIDTH: 2.080 in. [52.78 mm]
 HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 2.88 oz. (82 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, TNC-Bulkhead, 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-5641, MIL-E-5400, MIL-I-46208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

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QTY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REF
1	ADHESIVE GASKET	12345G-3M-1G				5
1						3
1						2
1						1
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .005 .015 ± 1°

TOLERANCE 51M PER ANSI Y14.5

REWORK ALL SURFACES EXCEPT EXTERIOR EDGES .005 TO .015

DRILL TO .005

SCREW THREADS PER MIL-S-8879

PLS ON A CONFORMING SURFACE

MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING

L1/L2 ACTIVE or PASSIVE RHCP/LHCP GPS ANTENNA

DATE: 01-05-29

DESIGNED BY: M. BOAS

01-05-29

APPROVED BY: S. HATHI

01-05-29

CAP FILE NO: D:\3CVE1\1G1215RL-PP-XX-X

SCALE 1/1

SHEET 1 OF 1

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