



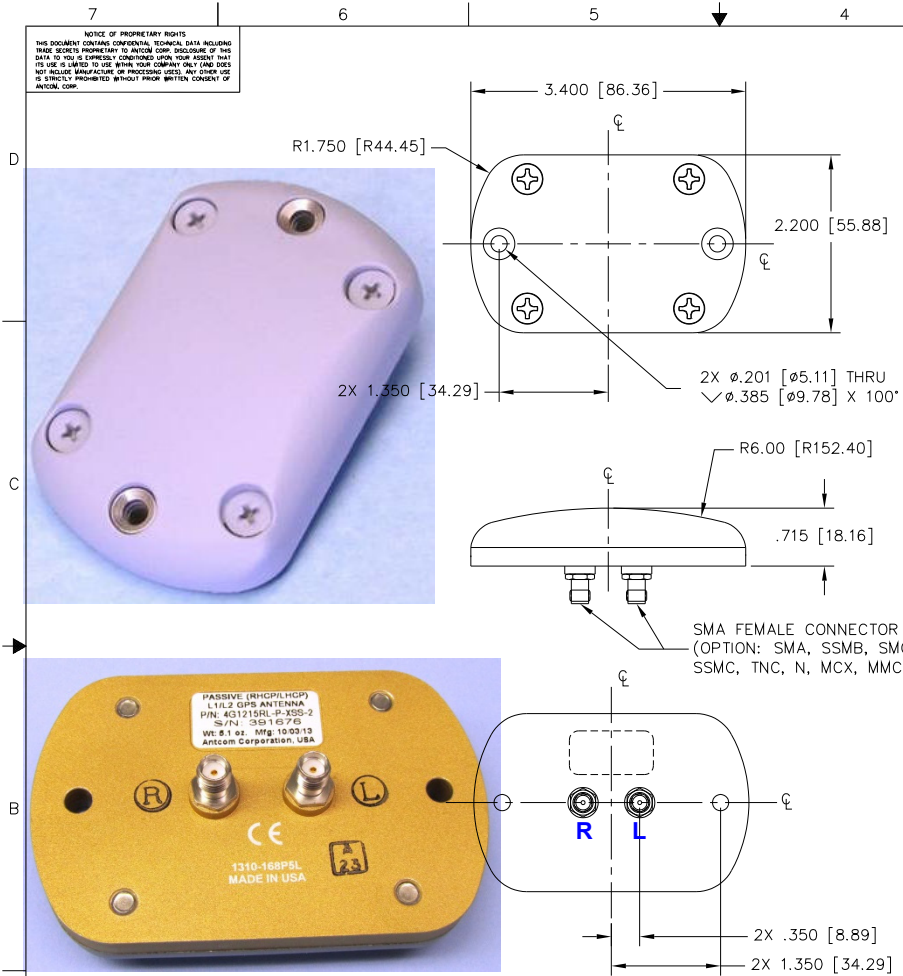
FAA Approved Facility

Dual Polarization (RHCP/LHCP) L1/L2 GPS Antenna, P/N: 4G1215RL-P-XSS-2
 Dual Polarization (Vertical/Horizontal) L1/L2 GPS Antenna, P/N: 4G1215VH-P-XSS-2
 Dual Polarization (RHCP/LHCP) L1/L2 GPS/Glonass, Antenna, P/N: G5AntRL-4PSS2
 2.2in. x 3.4in. X 0.71in. Configurations with Front/Back Mounting Option
 "-PL-" or "-AL-" for Limiter Options for High Power Pulse Protection



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Wide Band GNSS Option Is Available



SPECIFICATIONS
ELECTRICAL:

	REVISIONS					
	ZONE	REV	DESCRIPTION	DATE	APPROVED	
FREQUENCY:	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz		
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			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 OPTION:

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, (2.5-24)V/<50mA	
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB	-40 dB / -40 dB
@ (-100/+100) MHz	< -65 dB	< -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: 0.71 in. [18.16 mm], 5.15 oz. (146 g)
 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: 9in SMB MALE CABLE (OPTION: SMA, SSMB, SMC, SSMC, TNC, N, MCX, MMCX)

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

SIZE	FREQ. BAND	LNA
1: 2" SQ	1215: L1/L2	A: with +33dB LNA; A2: with 20 dB LNA; A27: with +27 dB LNA
1.9: 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 with LOW PASS FILTER/LIMITER
4: MINI ARINC		

P/N: 4G1215RL-P-XSS-2

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
#: CABLE LENGTH (IN)	SMB, SSMB, SMC, SSMC	-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
		-5: TAN #: FS 23446 or 33446, FED-STD-595

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	REV
4	MOUNTING SCREWS for -PL- ONLY: (10-32, 3/4")		MS24693C274	-	2
4	MOUNTING SCREW: (10-32, 1")		MS24693C276	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
FRACTIONS SHALL BE 1/64	DECIMALS SHALL BE ± .010
ANGLES SHALL BE ± 1°	TOLERANCE SURF PER AND Y14.5
	REMOVE ALL BURRS
	BREAK EXTERNAL EDGES .005 TO .015
	REMOVE ALL SHARP EDGES PER MIL-S-8879
	FINISH ON A CORNER & 2° RADIUS
	MACHINED SURFACES Y
	DO NOT SCALE DRAWING

ORIGINALLY DRAWN	S. HUYNH
ORIGINALLY DESIGNED <td>Mar-29-08 </td>	Mar-29-08
UPDATED <td>S. HUYNH </td>	S. HUYNH
UPDATE DRAWN <td>Mar-29-08 </td>	Mar-29-08
APPROVED <td>Oct-01-13 </td>	Oct-01-13

ANTCOM CORP. TORRANCE, CALIFORNIA	
RHCP/LHCP L1/L2 PASSIVE GPS ANTENNA	
REV	DATE
D1	3CVE1
SCALE	1/1
SHEET 1 OF 1	

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

Antenna Mounts: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf
 Amplifiers/Power Divider/Combiner/Filters: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf