



FAA Approved Facility

# RHCP/LHCP L1/L2 GPS Antenna, P/N: 2.3G1215P2-20SSMC-3

## Low Profile 2.3" Square, Flat/Back Mount Bolt on Configuration

### Suitable for Forming Multiple Element CRPA

"-PL-" or "-AL-" for Limiter Options for High Power Pulse Protection



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**SPECIFICATIONS**

**ELECTRICAL:**

	L1: (1575.42±12) MHz			L2: (1227.60±12) MHz		
	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP/LHCP					
VSWR:	< 2.0:1			< 2.0:1		
IMPEDANCE:	50 ohms					
ANTENNA GAIN (dBic):						
@ 90° (ZENITH):	+2.7	+4.7	+3.1	+1.5	+3.3	+4.5
@ 10° Elevation:	-4.4	-1.8	-1.9	-6.7	-3.8	-3.5
@ 20° Elevation:	-2.3	-0.3	+0.6	-5.6	-2.0	-0.8
@ 30° Elevation:	-0.8	+1.4	+1.7	-4.5	-0.5	+1.4
@ 60 - 90° Elevation:	> 2.0	> 3.9	> 2.4	> 0.0	> 2.7	> 2.2
BEAM WIDTH (3dB):	113 Deg.	114 Deg.	143 Deg.	85 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING					

**LNA OPTION:**

LNA GAIN: (21.0+/-2.0) 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: 2.31 in. [58.56 mm] SQ.  
HEIGHT: 0.37 in. [9.35 mm]  
WEIGHT: 2.8 oz. (80 g)  
FINISH: SKYDROL RESISTANT POLYURETHAN ENAMEL BASE IRIDITE PER MIL-C-5441  
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE  
CONNECTOR: 20 IN SSMC MALE CABLES (OPTION: SMC, SMB, SSMB, SMA, PIN, TNC, 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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, AND MIL-STD-810

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
	1			

Wide Band GNSS Option Is Available

**SIZE:** 1: 2" SQ. 2: 2.6" DIA. 3: 3.5" DIA.

**FREQ. BAND:** 1215: L1/L2 15: L1 ONLY

**POLARIZATION/LNA OPTIONS:** A2: WITH 20 dB LNA A4: WITH 40 dB LNA P: WITHOUT LNA P2: WITHOUT LNA, WITH RHCP/LHCP POLARIZATION P2L: WITHOUT LNA, WITH DUAL LINEAR POLARIZATION

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**CABLE'S LENGTH:** X: NO CABLE M: MAG. N: NO MAG R: RIGHT ANGLE CON.

**CONNECTOR:** S: SMA; P: P2 PINS N: NB; RS: R-SMA T: TB; TNC, TNC-Bulkhead

**COLOR:** 1: GLOSS WHITE #17925 PER FED-STD-595B 2: LUSTERLESS GRAY #36320 PER FED-STD-595B 3: OLIVE DRAB GREEN #34031 PER FED-STD-595B 4: LUSTERLESS BLACK #37038 PER FED-STD-595B

1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	1
QUANTITY REQD						ITEM NO
PARTS LIST						
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCES ARE ± 1/64 .004 .020 .010 ± 1°						
TOLERANCE SYM PER ANS1 Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILED R .005 TO R .030 SCREW THREADS PER MIL-S-8879 DIA'S ON A COMMON 6-27 .005 MACHINED SURFACES ✓ DO NOT SCALE DRAWING						
DRAWN		CHECKED		ENGINEER		
APPROVED		S. HUYNH		REV		
CAD FILE NO		DEC-08-06		REV		

**ANTCOM CORP.** TORRANCE, CALIFORNIA

2.3" SQUARE, L1/L2 PASSIVE RHCP/LHCP GPS ANTENNA

SCALE 1/1 SHEET 1 OF 1

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

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Amplifiers/Power Divider/Combiner/Filter: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf>