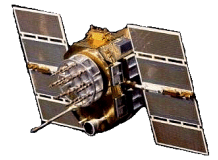




# RHCP/LHCP L1/L2 GPS Antenna, P/N: 1.9G1215P2-20SSMCB-3 Rev D

## Low Profile (1.9X1.9x0.36) in, Flat/Front Mount Configuration



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>

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**PHOTO A:** Antenna with cables and connectors.

**PHOTO B:** Close-up of connectors P1 and P2.

**PHOTO C:** Close-up of the antenna's top surface.

**4xR.72 [R18.19]**

**1.91 [48.56] SQ. [+/-0.4mm]**

**.36 [9.25] (+/- 0.006in or +/-0.15mm)**

**.12 [3.05] [3.2mm Max]**

**0.26in [6.5mm Max]**

**0.759 [19.28mm]**

**0.39in [10mm Max]**

**MOUNTING: ADHESIVE**

**P2 (LHCP) SSMB-M, 19.69in (500+/-5mm)**

**P1 (RHCP) SSMC-M, 19.69in (500+/-5mm)**

ISS LLC, CCF# 440V1  
PART GPS ANTENNA  
P/N: 65000064-101  
S/N: 127024, SC#: 13618727  
C #: W31P4Q-04-C-0059  
WT: 2.4 oz. 10-17-08

**P/N: 1.9G1215P2-20SSMCB-3**

SIZE:	FREQ. BAND:	POLARIZATION/LNA OPTIONS:
1.2" SQ.	1215 L1/L2	A2: WITH 20 dB LNA
1.9" 1.9" SQ.	15 L1 ONLY	A4: WITH 40 dB LNA
2.3" 2.3" SQ.		P: WITHOUT LNA
2.6" DIA.		P2: WITHOUT LNA, WITH RHCP/LHCP POLARIZATION
3.5" DIA.		P2L: WITHOUT LNA, WITH DUAL LINEAR POLARIZATION

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: P2; 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)	N: NB; RS: R-SMA	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

**SPECIFICATIONS**

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz				
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP/LHCP					
VSWR:	< 2.0:1					
IMPEDANCE:	50 ohms					
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 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		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: 1.912in.[48.56mm] SQ.  
HEIGHT: 0.36 in. [9.25 mm]  
WEIGHT: 2.4 oz. (69 g)  
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441  
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE  
CONNECTOR: 19.69IN 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: 70,000ft.  
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

1	ADHESIVE GASKET	12345G-3M-1G	-	-	-	1
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**QUANTITY REQD**

DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
PARTS LIST					

**ANTCOM CORP.** TORRANCE CALIFORNIA

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

DRAWN: \_\_\_\_\_ CHECKED: \_\_\_\_\_ ENGINEER: \_\_\_\_\_ APPROVED: S. HUYNH JUN-05-08

SCALE: 1/1 SHEET 1 OF 1

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
D		Dim in Rect Boxes	Oct-07-08	S.H

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**UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES**

FRACTIONS TOLERANCES ARE: DECIMALS ANGLES  
± 1/64 .XX ± .020 ± .010 ± 1°

TOLERANCE SYM PER ANSI Y14.5

REMOVE ALL BURRS  
BREAK EXTERNAL EDGES .005 TO .015 FILLETS R .005 TO R .030  
SCREW THREADS PER MIL-S-8879  
DIA'S ON A COMMON & 2/F .005

MACHINED SURFACES ✓

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

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

DRAWN: \_\_\_\_\_ CHECKED: \_\_\_\_\_ ENGINEER: \_\_\_\_\_ APPROVED: S. HUYNH JUN-05-08

SCALE: 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas