



FAA Approved Facility

RHCP/LHCP L1/L2 GPS Antenna, P/N: 2.3G1215P2-20SSMCB-3 Rev A

Low Profile (2.15x2.07x0.37) in, Flat/Front Mount Configuration




“-PL-” or “-AL-” for Limiter Options for High Power Pulse Protection


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REVISIONS	
ZONE	DESCRIPTION



SPECIFICATIONS						
ELECTRICAL:		L1: (1575.42±12) MHz		L2: (1227.60±12) MHz		
FREQUENCY:		HEMISPHERICAL				
RADIATION PATTERN:		RHCP/LHCP				
POLARIZATION:						
VSWR:		< 2.0:1		< 2.0:1		
IMPEDANCE		50 ohms		50 ohms		
ANTENNA GAIN (dBic):		Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.
@ 90 ° (ZENITH):		+2.7	+4.7	+3.1	+1.5	+3.3
@ 10 ° Elevation:		-4.4	-1.8	-1.9	-6.7	-3.8
@ 20 ° Elevation:		-2.3	-0.3	+0.6	-5.6	-2.0
@ 30 ° Elevation:		-0.8	+1.4	+1.7	-4.5	-0.5
@ 60 - 90 ° Elevation:		>2.0	>3.9	>2.4	> 0.0	> 2.2
BEAM WIDTH (3dB):		113 Deg.	114 Deg.	143 Deg.	85 Deg.	106 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: SKYDROLRESISTANTPOLYURETHANENAMEL BASE IRIDITEPERMIL-C-5441
MATERIAL: 6061-T6ALUMINUMALLOY BASE THERMOSETPLASTICRADOME,UV, ABRASIONAND SKYDROL RESISTANCE
CONNECTOR: P1: RHCP with 20 in (500mm) SSMC MALE CABLES
P2: LHCP with 20 in (500mm)SSMB MALE CABLES

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE: 70,000ft.
VIBRATION: >30 G's
LEAKAGE: HERMETICALLYSEAL

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

Wide Band GNSS Option Is Available

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: 2.3" SQ		P: WITHOUT LNA
2: 2.6" DIA		P2: WITHOUT LNA, WITH RHCP/LHCP POLARIZATION
3: 3.5" DIA		P2L: WITHOUT LNA, WITH DUAL LINEAR POLARIZATION

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1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PZ PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. V: NO MAG.	SSMC, SSMB	-2: LUSTERLESS GRAY #93520 PER FED-STD-595B
F: 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

1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE DECIMALS TOLERANCES ARE ± 1/64 .XX± .020 ± 1' .XXX± .010

TOLERANCE SYM PER ANSI Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILETS R .030 TO R .050 SCREW THREADS PER MIL-S-8879 DIA'S ON A CONFORM @ 24° ANGLES MACHINED SURFACES 125 DO NOT SCALE DRAWING

DRAWN	
CHECKED	
ENGINEER	
APPROVED	S. HUYNH Sep/05/07
CAD FILE NO	

ANTCOM CORP. TORRANCE CALIFORNIA

L1/L2 PASSIVE RHCP/LHCP GPS ANTENNA for NLOS (PAM)

SCALE 1/1 SHEET 1 OF 1

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