

## 2-Element L1/L2 GPS CRPA Antenna with Limiters:

P/N: 2CC-6TKG1.9G1215PL-12SSMB-2

(5.820 x 2.900 x 0.610)in, Lower Antenna with 12in SSMB Plug Cables

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

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Detailed Dimensions are in 3D CAD File (lower\_gps\_final\_2,Oct-24-08.igs)

**SPECIFICATIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

**ELECTRICAL:**

	L1: (1575.42 ±15) MHz	L2: (1227.60 ±15) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	RHCP
VSWR:	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms
ANTENNA ELEMENT T GAIN (dBic):	Free Space 3.5 in Dia. 4 ft G.P.	Free Space 3.5 in Dia. 4 ft G.P.
@ 90 ° (ZENITH):	+ 4.5 + 5.4 + 2.4	+ 2.5 + 4.1 + 5.6
@ 10 ° Elevation:	- 1.5 - 1.6 - 1.7	- 4.3 - 3.2 - 2.8
@ 20 ° Elevation:	0.0 0.0 + 0.9	- 3.0 - 1.6 + 0.5
@ 30 ° Elevation:	+ 1.1 + 1.3 + 2.0	- 1.5 - 0.3 + 2.4
@ 60 - 90 ° Elevation:	> 3.0 > 4.2 > 2.5	> 1.7 > 2.7 > 3.6
BEAM WIDTH (3dB):	112 Deg. 102 Deg. 145 Deg.	104 Deg. 93 Deg. 80 Deg.
AXIAL RATIO:	2 dB	2 dB
LIGHTNING PROTECTION:	DC GROUNDING	
POWER HANDLING:	WITH LIMITER DIODES SIMILAR TO THAT OF PAVEWAY-002	

**MECHANICAL:**

SIZE: LENGTH: 5.820 in [147.8mm]; WIDTH: 2.900 in [73.66mm]  
 HEIGHT: 0.610 in. [15.49mm]  
 WEIGHT: 10.9oz. (309g)  
 FINISH: SKYDROLRESISTANTPOLYURETHANEENAMEL  
 BASE IRIDITEPER MIL-C-5541F Class 1A  
 MATERIAL: 6061-T6ALUMINUMALLOY BASE  
 CONNECTOR: 12in RG316SSMB PLUG  
 (OPTION: 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: HERMETICALLYSEAL

**FEDERAL & MILITARY SPECIFICATIONS**

DESIGN TO: FAA TSO-C144, D0-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE ATP-GPS-L1L2-100

QUANTITY	REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	HTG
4	-					
A/R	-					3
1	1					1
-2	-1					

CONFORMALITY:	SIZE (INCHES)	SHAPE	ELEMENT SIZE	FREQ. BAND	LNA:
CC: CONFORMAL/CURVED	C: CIRCULAR	1.9: 1.9in Sq.	1215: L1/L2	A: WITH LNA	
CF: CONFORMAL/FLAT	S: SQUARE	1.2: 1.2in Sq.	15: L1 ONLY	AL: WITH LNA/LIMITER	
NF: NOT CONFORMAL/FLAT	T: TRIANGULAR			P: WITHOUT LNA	
NC: NOT CONFORMAL/CURVED	H: HEXAGON			P2: WITHOUT LNA/DUAL RHCP/LHCP/POL.	
	R: RECTANGULAR			PL: WITH LIMITER DIODES	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .0005 ± 1/64 .0005

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

NUMBER OF ELEMENT:	CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	SSMB: SSMA: SSMC: S: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B	
M: MAG. N: NOMAG	M: MCX: MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B	
#: CABLE LENGTH (IN)	N: NB: N: N-Bulkhead	-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	

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**ANTCOM CORP.** TORRANCE, CALIFORNIA

2-ELEMENT  
2 CHANNEL PASSIVE L1L2 GPS CRPA  
ANTENNA FOR SDBII LOWER ANTENNA

D13CVE1 2CC-6TKG1.9G1215PL-12SSMB-2

SCALE 1/1 SHEET 1 OF 1

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