

Conformal L1/L2 GPS FRPA Antenna Element Can be Used to Form Multiple Element CRPA 2.6" Diameter, P/N: 2CG1215X-XS-2-X

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

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Wide Band GNSS Option Is Available

Without Radome Option

655 [16.63]

.460 [11.68] (without Radome Option)

4x.800 [20.32]

4x.800 [20.32]

.068 [1.72]

1.600 [40.64]

1.600 [40.64]

2.600 [66.04]

R6.000 [R152.40]

R.375 [R9.52]

4X 6-32 UNC-2B X .15" (3): 15.5" (3.5N): 13.2" (4P): 11.5" (6M): 7.7" (7.5E): 6.1" (5): 9.2" (-X): [ASIN(0.8/RX.XXX)]

SMA FEMALE CONNECTOR (OPTION: TNC, TNC Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)

1.600 [40.64]

.257 [6.52]

SPECIFICATIONS

		REVISIONS						
ZONE	REV	DESCRIPTION	DATE	APPROVED				

ELECTRICAL:

	L1: (1575.42±12) MHz			L2: (1227.60±12) MHz		
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL		
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNAGAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90° (ZENITH):	+5.0	+4.7	+3.1	+3.1	+3.3	+4.5
@ 10° Elevation:	-2.1	-1.8	-1.9	-5.8	-3.8	-3.5
@ 20° Elevation:	-0.6	-0.3	+0.6	-4.3	-2.0	-0.8
@ 30° Elevation:	+0.9	+1.4	+1.7	-3.4	-0.5	+1.4
@ 60-90° Elevation:	> 4.0	> 3.9	> 2.4	> -0.9	> 2.7	> 2.2
BEAMWIDTH(3dB):	103 Deg	114 Deg	143 Deg	94 Deg	106 Deg	74 Deg
AXIALRATIO:	2 dB			2 dB		
LIGHTNINGPROTECTION:	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, (2.5-24V)/<50mA	
REJECTION@ (-50/+50)MHz:	-41 dB / -59 dB	-40 dB / -40 dB
@ (-100/+100)MHz:	< -65 dB	< -65 dB
POWERHANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)	

MECHANICAL:

SIZE: DIAMETER: 2.60 in. [66.04 mm]
HEIGHT: 0.655 in. [16.63 mm], 0.460 in. [11.68 mm] (without Radome)
WEIGHT: 5.5 oz. (156 g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDIUM PER MIL-C-5441
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE AND FIRE RETARDANT
CONNECTOR: SMA FEMALE (OPTION: TNC, N, TNC- & 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, MIL-STD-810, AND SAE J1455

QUANTITY	RECD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1		ADHESIVE GASKET	123456-3M-2G				5
1							3
1							2
1							1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FRACTIONS: DECIMALS: ANGLES: 16/64 0.015 1°
TOLERANCE 51M PER ANSI Y14.5
REWORK ALL SURFACES BEING CUT/EDGES .006 TO .016
SCREW THREADS PER MIL-S-8879
DAYS ON A CALENDAR 2/2/06
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA
2.6" DIA.
X" RADIUS CONFORMAL
L1/L2 GPS ANTENNA
REV: D 3CVE1 2CG1215A-XS-2-X
SCALE 1/1 SHEET 1 OF 1

2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
NOTES: UNLESS OTHERWISE SPECIFIED:

SIZE OPTION:	FREQ. BAND	LNA OPTION	CONFORMAL RADIUS OPTION:
1: 2" SQ.	1215:L1/L2	A: WITH LNA	-3: 3.000" RADIUS (SDBII)
1.9: 1.9" SQ.	15:L1 ONLY	AL: WITH LNA/LIMITER	-3.5N: 3.500" RADIUS (NETFIRE GMLRS)
2: 2.6" DIA.		P: WITHOUT LNA	-4P: 4.000" RADIUS (PAVEWAY)
3: 3.5" DIA.			-6M: 6.000" RADIUS (MAVERICK)
4: MINI ARINC			-7.5E: 7.500" RADIUS (ESBU, MALD)
			-14A: 14.000" RADIUS (ACM)
			-X: X" RADIUS (0: Flat, No Radius)

P/N: 2CG1215A-XS-2-X

RADOME OPTION:	CONNECTOR OPTION:	COLOR OPTION:
R: WITH RADOME	S: SMA; RS: Right Angle SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
N: NO RADOME	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	T: TNC; TNC: Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

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