



FAA Approved Facility

4-Element CRPA L1/L2 GPS Antenna Array: (3.75" Sq. x 0.716" Thick), 3.4-3.5" Conformal Radius,

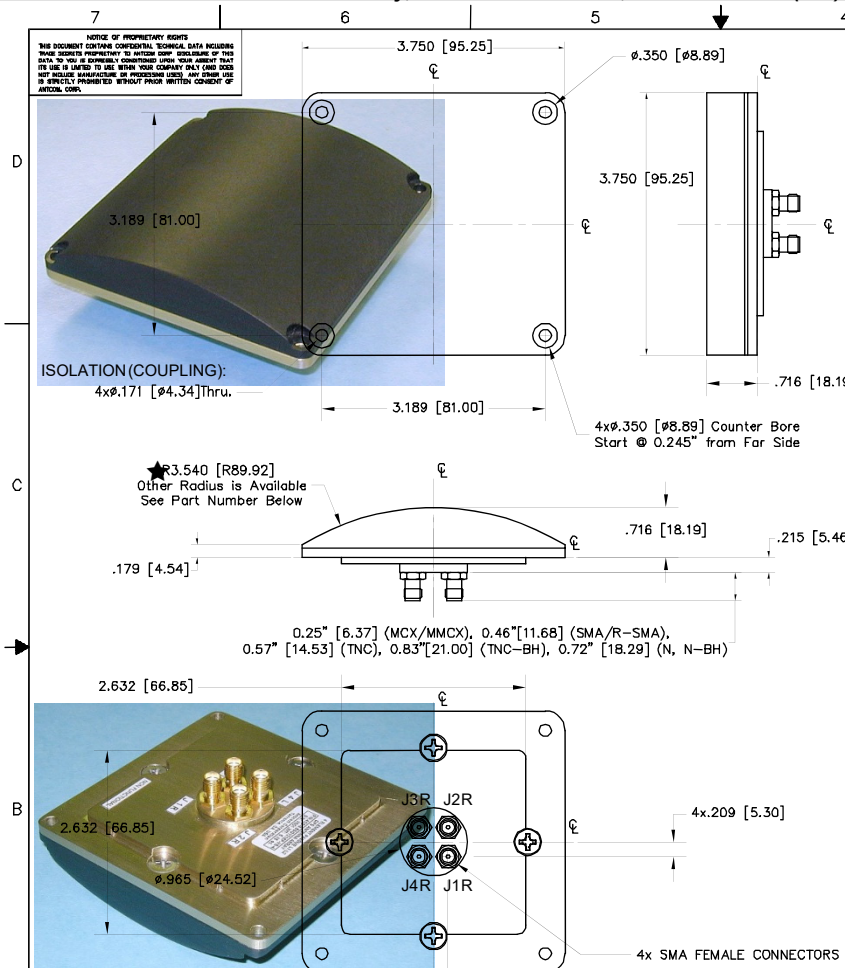
P/N: 4CC-3.75SG1215X-XS-X-X

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



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Wide Band GNSS Option Is Available



SPECIFICATIONS		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED
ELECTRICAL:				
FREQUENCY +/- 1dB BW:	L1: (1575.42 ± 50) MHz	L2: (1227.60 ± 27) MHz		
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP	RHCP		
VSWR:	< 1.5:1	< 1.5:1		
IMPEDANCE:	50 ohms	50 ohms		
ANTENNA GAIN (dBic):	Free Space	Free Space		
@ 90 ° (ZENITH):	+0.2	-2.2		
@ 10 ° Elevation:	-6.4	-7.8		
@ 20 ° Elevation:	-4.8	-6.7		
@ 30 ° Elevation:	-3.5	-5.7		
@ 60 - 90 ° Elevation:	> -0.5	> -3.7		
BEAM WIDTH (3dB):	108 Deg.	100 Deg.		
AXIAL RATIO:	2 dB	2 dB		
HIGH POWER PROTECTION	OPTIONAL: WITH FILTER/LIMITER (INPUT: +50dBm, OUPUT: +30 dBm)			
LNA OPTION:				
LNA GAIN:	(22.0±1.2) dB			
LNA NOISE FIGURE:	1.8 dB			
LNA P 1dB Out:	+16 dBm			
VOLTAGE/CURRENT:	(+2.5 TO +5) Volts DC / (15 TO 25) mA			
MECHANICAL:				
SIZE:	3.75" [95.25 mm] SQUARE			
HEIGHT:	0.716 in. [18.19 mm]			
WEIGHT:	5.15 oz. (.146 Kg)			
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE 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, 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, MIL-STD-810, AND SAE J1455			
ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100				

CONFORMALITY:	SIZE (INCHES):	SHAPE:	LNA:	CONFORMAL RADIUS OPTION
CC: CONFORMAL/CURVED	3.75" SQ.	C. CIRCULAR	A. WITH LNA	-3: 3.000" RADIUS
CF: CONFORMAL/FLAT	3.5" SQ.	S. SQUARE	AL. WITH LNA/LIMITER/FILTER (INPUT: +50dBm, OUPUT: +30 dBm)	-3.5N: 3.500" RADIUS (NET FIRE MIL-RSNLOS)
NF: NOT CONFORMAL/FLAT	3.5" CIRCULAR	T. TRIANGULAR	P. WITHOUT LNA	-4P: 4.000" RADIUS (PAVEWAY)
NC: NOT CONFORMAL/CURVED		H. HEXAGON	PL. PASSIVE WITH LIMITER/FILTER (INPUT: +50dBm, OUPUT: +30 dBm)	-6M: 6.000" RADIUS (MAVERICK)
		R. RECTANGULAR		-7.5EM7.500" RADIUS (EGBUMALD)
				-14A: 14.000" RADIUS (ACM)
				-X: X" RADIUS (0. Flat, No Radius)

P/N: 4CC-3.75SG1215P-XS-4-3.5N

NUMBER OF ELEMENT:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: 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: 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	

QUANTITY	DESCRIPTION	PARTS LIST	PART NO	FINISH	QTY
4	-				5
A/R	-				3
1	1				1
-2	-1				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN	
FRACTIONS TO BE SHOWN AS DECIMALS	TOLERANCE PER ANSI Y14.5	CHECKED	
± 1/64	± .0005	ENGINEER	
± .0005	± .001	APPROVED	S. HUYNH
± .001	± .002	DATE	NOV-22-04
± .002	± .005	DO NOT SCALE DRAWING	

ANTCOM CORP. TORRANCE CALIFORNIA	
3.75" SQUARE	
4 ELEMENT CRPA L1L2 GPS	
ANTENNA ARRAY	
D 3CVE1	4CC-3.75SG1215P-XS-4-3.5N
SCALE 1/1	SHEET 1 OF 1

Antenna Mounts: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf
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