

4-Element CRPA L1/L2 GPS Antenna Array (5.2" x 5.2" x 0.7"), P/N: 4CF-5SG1215PL-XS-4

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

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Wide Band GNSS Option Is Available.
Compatibility to IGAS Receiver Options are Available.

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

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REVISIONS	
ZONE	DESCRIPTION

SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA ELEMENT T GAIN (dBic):	Free Space	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.5	+ 5.6
@ 10 ° Elevation:	- 1.5	- 2.8
@ 20 ° Elevation:	0.0	+ 0.5
@ 30 ° Elevation:	+ 1.1	+ 2.4
@ 60 - 90 ° Elevation:	> 3.0	> 3.6
BEAM WIDTH (3dB):	112 Deg.	80 Deg.
AXIAL RATIO:	2 dB	
NULL DEPTH	>30 dB (Analog), 55-60 dB (Digital)	
LIGHTNING PROTECTION:	DC GROUNDING G	
POWER HANDLING:	200 Watt CW	

MECHANICAL:

SIZE: 5.156 in [130.96mm] SQUARE
HEIGHT=0.68in[17mm]

WEIGHT: 12.4 oz. (352g)

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, 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, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810 AND SAE J1455

ACCEPTANCE TEST PROCEDURE ATP-GPS-L1L2-100

CONFORMALITY:

CC	SIZE (INCHES)	SHAPE	FREQ. BAND	LNA
CC: CONFORMAL/CURVED	C: CIRCULAR	C: CIRCULAR	1215: L1/L2	A: WITH LNA
CF: CONFORMAL/FLAT	S: SQUARE	S: SQUARE	15: L1 ONLY	AL: WITH LNA/LIMITER
NE: NOT CONFORMAL/FLAT	T: TRIANGULAR	T: TRIANGULAR		P: WITHOUT LNA
NC: NOT CONFORMAL/CURVED	H: HEXAGON	H: HEXAGON		PL: WITHOUT LNA, WITH LIMITER
	R: RECTANGULAR	R: RECTANGULAR		

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NUMBER OF ELEMENT:	CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B	
M: MAG; N: NOMAG	M: MMCX; 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	

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

4	-	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	5
A/R	-			-	3
1	1			-	1
-2	-1	DESCRIPTION	PARTS LIST	PART NO	FINISH

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FRACTIONS 1/64 DECIMALS .005 ANGLES 1/2° ± 1°
TOLERANCE SURF PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILE TO .001 TO .002
SCREW THREADS PER MIL-S-8879
DITS ON A COMPASS ±.0000
MACHINED SURFACES ✓

ANTCOM CORP. TORRANCE, CALIFORNIA
OUTLINE DRAWING:
4 ELEMENT L1L2 GPS SQUARE CONFORMAL FLAT ANTENNA ARRAY

DESIGNED: S. HUYNH
ENGINEER: S. HUYNH
MAY-28-01
DRAWN: D. JOVE
CHECKED: S. HUYNH
APPROVED: S. HUYNH
CAG FILE NO: 4CF-5SG1215PL-XS-4
SCALE: 1/1
SHEET 1 OF 1