



FAA Approved Facility

4-Element CRPA L1/L2 GPS Antenna Array



P/N: 4CF-5SG1215P-XS-4-RoHS

(5.2" x 5.2" x 0.7"), Lusterless Black #37038 FED-STD-595B

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



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

SPECIFICATIONS

ZONE		REV	DESCRIPTION	DATE	APPROVED
A				OCT-09-13	S.H.

REVISIONS

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 GAIN (dBic):	Free Space	3.5 in Dia.
@ 90 ° (ZENITH):	+ 4.5	+ 5.4
@ 10 ° Elevation:	- 1.5	- 1.6
@ 20 ° Elevation:	0.0	0.0
@ 30 ° Elevation:	+ 1.1	+ 1.3
@ 60 - 90 ° Elevation:	> 3.0	> 4.2
BEAM WIDTH (3dB):	112 Deg.	102 Deg.
AXIAL RATIO:	2 dB	
NULL DEPTH:	>30 dB (Analog), 55-60 dB (Digital)	
LIGHTNING PROTECTION:	DC GROUNDING	
POWER HANDLING:	200 Watt CW	

MECHANICAL:

SIZE: 5.156 in [130.96 mm] SQUARE
 HEIGHT= 0.68in [17mm]
 WEIGHT: 12.4 oz. (352 g)
 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

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	TEST NO
4	1	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	1
-2	-1				

UNLESS OTHERWISE SPECIFIED		PARTS LIST		ANTCOM CORP. TORRANCE CALIFORNIA	
DECIMALS ARE IN INCHES	ORIGINAL DRAWN	S. HUYNH	May-29-01	OUTLINE DRAWING: 4 ELEMENT L1L2 GPS SQUARE CONFORMAL FLAT ANTENNA ARRAY D 3CVE1 4CF-5SG1215P-PL-XS-4-RoHS A	
FRACTIONS ARE IN INCHES	ORIGINAL DESIGNED	HUYNH	May-29-01		
ANGLES	UPDATED	S. HUYNH	Oct-09-13		
± 1/64	DATE	TL DEEP	Oct-09-13		
TOLERANCE SYM PER ANSI Y14.5	APPROVED	S. HUYNH	Oct-09-13	SCALE 1/1	SHEET 1 OF 1
MINIMUM ALL DIMS	DO NOT SCALE DRAWING				
BREAK EXTERNAL EDGES .000 TO .010					
FILED & DIMS TO 100					
SOLELY THREADS PER MIL-C-8879					
DATE ON A COMBINATION OF					
0.005					
MACHINED SURFACES					
1/2					

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