



FAA Approved Facility

# 4 Element CRPA L1L2 GPS Antenna Array

P/N: 4NF-4.7CG1215P-XS-1-13.9-2

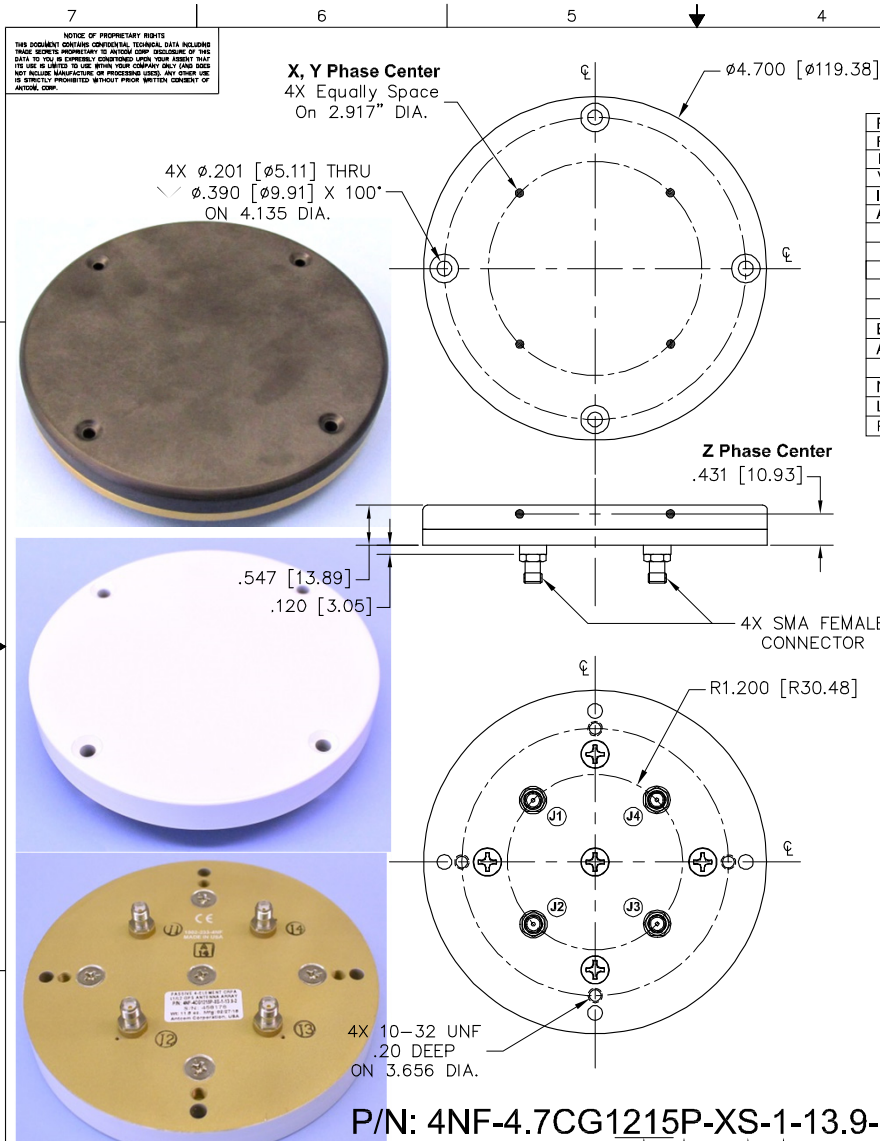
4.70" Dia. x 0.547" Thick

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



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

Wide Band GNSS Option Is Available



## SPECIFICATIONS

		REVISIONS			
ZONE	REV	DESCRIPTION	DATE	APPROVED	
<b>ELECTRICAL:</b>					
FREQUENCY:	L1: (1575.42 ±12) MHz		L2: (1227.60 ±12) MHz		
RADIATION PATTERN:	HEMISPHERICAL				
POLARIZATION:	RHCP		RHCP		
VSWR:	< 1.5:1		< 1.5:1		
IMPEDANCE:	50 ohms		50 ohms		
ANTENNA ELEMENT GAIN (dBic):	Free Space	3.5 in Dia.	4 ft G.P.	Free Space	3.5 in Dia.
@ 90° (ZENITH):	+ 4.5	+ 5.4	+ 2.4	+ 2.5	+ 4.1
@ 10° Elevation:	- 1.5	- 1.6	- 1.7	- 4.3	- 3.2
@ 20° Elevation:	0.0	0.0	+ 0.9	- 3.0	- 1.6
@ 30° Elevation:	+ 1.1	+ 1.3	+ 2.0	- 1.5	- 0.3
@ 60 - 90° Elevation:	> 3.0	> 4.2	> 2.5	> 1.7	> 2.7
BEAM WIDTH (3dB):	112 Deg.	102 Deg.	145 Deg.	104 Deg.	93 Deg.
AXIAL RATIO:	2 dB		2 dB		
NULL DEPTH:	> 30 dB (Analog), 55-60 dB (Digital)				
LIGHTNING PROTECTION:	DC GROUNDING				
POWER HANDLING:	200 Watt CW				

## MECHANICAL:

**SIZE:** DIAMETER: 4.70 in. [119.38 mm]  
HEIGHT: 0.547 in. [13.89 mm]  
TBD

**WEIGHT:** TBD

**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	PART NO	FINISH	REV
4	MOUNTING SCREWS: 10-32, 1.00"	MS24693C276, Item 579	-	1
-2	-	-	-	-

CONFORMALITY:	SHAPE:	FREQ. BAND:	LNA:	CONNECTOR:	COLOR:
CC: CONFORMAL/CURVED	C: CIRCULAR	1215; L1/L2	A: WITH LNA	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
CF: CONFORMAL/FLAT	S: SQUARE	15; L1 ONLY	AL: WITH LNA/LIMITER	M: MCX; MV: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
NF: NOT CONFORMAL/FLAT	T: TRIANGULAR		P: WITHOUT LNA	N: N; N: N Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
NC: NOT CONFORMAL/CURVED	R: RECTANGULAR			T: T; TNC; TNC-Bulkhead	-30: OLIVE DRAB GREEN #34088 PER FED-STD-595B
				X: X In Cable	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
					-5: DESERT TAN #33448 PER FED-STD-595B

**ANTCOM CORP.** TORRANCE, CALIFORNIA

7.000" DIA. 4 ELEMENT  
L1/L2 GPS SMALL  
CIRCULAR ANTENNA ARRAY

DATE: 11/15/11  
DRAWN BY: S. HUYNH  
CHECKED BY: P. TRAN  
APPROVED BY: S. HUYNH

4NF-4.7CG1215P-XS-1-13.9-2

SCALE: 1/1

SHEET 1 OF 1

http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf (Amplifiers/Power Divider/Combiner/Filters)