



FAA Approved Facility

4-Element CRPA L1/L2 GPS Antenna Array (4.7" Dia. x 1.4" High), P/N: 4NF-4.7CG1215P-XS-X

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



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Wide Band GNSS Option Is Available

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4x1.457 [37.00]
4x1.457 [37.00]
1.400 [35.57]
4x1.457 [37.00]

4x10-32 UNF, 0.1" Deep
4x1.120 [104.65]
10-32 UNF, 0.250" Deep

4x SMA FEMALE CONNECTORS Equally Spaced on 0.748" Rad.

CONFORMALITY:
CC: CONFORMAL CURVED
CF: CONFORMAL FLAT
NF: NOT CONFORMAL FLAT
NC: NOT CONFORMAL CURVED

SIZE (INCHES):
C: CIRCULAR
S: SQUARE
T: TRIANGULAR
H: HEXAGON
R: RECTANGULAR

SHAPE:
C: CIRCULAR
S: SQUARE
T: TRIANGULAR
H: HEXAGON
R: RECTANGULAR

FREQ. BAND:
1215, 1162
15: L1 ONLY
P: WITHOUT LNA

LNA:
A: WITH LNA
AL: WITH LNA/LIMITER
P: WITHOUT LNA

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
NOTES: UNLESS OTHERWISE SPECIFIED:

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 #39320 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	

SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 1.5:1
IMPEDANCE:	50 ohms	
ANTENNA ELEMENT GAIN (dBic):	Free Space 3.5 in Dia.	4 ft G.P.
@ 90° (ZENITH):	+ 4.5	+ 2.4
@ 10° Elevation:	- 1.5	- 1.7
@ 20° Elevation:	0.0	+ 0.9
@ 30° Elevation:	+ 1.1	+ 2.0
@ 60 - 90° Elevation:	> 3.0	> 2.5
BEAM WIDTH (3dB):	112 Deg.	104 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: DIAMETER: 4.700 in [119.38 mm]
HEIGHT: 1.400 in. [35.57 mm]

WEIGHT: XX oz. (XX 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 SEALED

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	REF ID
4	MOUNTING SCREWS: 10-32, 3/4"	MS24683C274	-	5
A/R	-	-	-	3
1	1	-	-	1
-2	-1	-	-	-

P/N: 4NF-4.7CG1215P-XS-4

ANTCOM CORP. TORRANCE, CALIFORNIA
OUTLINE DRAWING:
4 ELEMENT L1L2 GPS
CIRCULAR ANTENNA ARRAY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FRACTIONS TO DECIMALS AND DECIMALS TO FRACTIONS
± 1/64 0.0005 ± 1" 0.0005
TOLERANCE 5/16 PER ASH Y14.5
BEVEL ALL EDGES
BREAK EXTERNAL EDGES 0.05 TO .015
FILL IN ALL HOLES
DIMENSIONS TO CENTER UNLESS OTHERWISE SPECIFIED
MAGNIFIED SURFACES

DO NOT SCALE DRAWING

APPROVED: S. HUYNH NOV-10-04
DATE FILED: NOV-10-04

SCALE 1/1

SHEET 1 OF 1

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