



FAA Approved Facility

3-Element-5-Channel (1 RHCP, 2 E/2 H)
 CRPA L1/L2 GPS CLU NLOS Antenna Array:
 (4.72" Dia. x 0.428" Thick), P/N: 3NF-4.7CG1215P2L-XS-3 Rev H (Passive)
 (P/N: 13-2008-040 Rev G)

"-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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**4X Ø.195 [Ø4.95] THRU
 ✓ Ø.385 [Ø9.78] X 100"
 4 PLACES, 90 DEG APART
 ON 2.161" RADIUS FOR
 10-32 MOUNTING SCREWS**

**3X10-32 UNF, 0.1" Deep
 3 PLACES, 120 DEG APART
 ON 1.25" RADIUS FOR
 10-32 MOUNTING SCREWS**

5x SMA FEMALE CONNECTORS

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

FREQ BAND:
 L1: L1/L2

LNA:
 A: WITH LNA
 AL: WITH LNA/LIMITER
 P: WITHOUT LNA
 P2: WITHOUT LNA/DUAL RHCP/LHCP POL.
 P2L: WITHOUT LNA/DUAL NEAR POLARIZATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42 ±15) MHz			L2: (1227.60 ±15) MHz		
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA ELEMENT GAIN (dBi):	Free Space	3.5 in Dia.	4 ft G.P.	Free Space	3.5 in Dia.	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.5	+ 5.4	+ 2.4	+ 2.5	+ 4.1	+ 5.6
@ 10 ° Elevation:	- 1.5	- 1.6	- 1.7	- 4.3	- 3.2	- 2.8
@ 20 ° Elevation:	0.0	0.0	+ 0.9	- 3.0	- 1.6	+ 0.5
@ 30 ° Elevation:	+ 1.1	+ 1.3	+ 2.0	- 1.5	- 0.3	+ 2.4
@ 60 - 90 ° Elevation:	> 3.0	> 4.2	> 2.5	> 1.7	> 2.7	> 3.6
BEAM WIDTH (3dB):	112 Deg.	102 Deg.	145 Deg.	104 Deg.	93 Deg.	80 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING					
POWER HANDLING:	200 Watt CW					

MECHANICAL:

SIZE: DIAMETER: 4.72 in [119.89 mm]
 HEIGHT: 0.428 in. [10.87 mm]
 WEIGHT: 12oz. (340 g)
 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: 70,000 ft.
 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

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

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS: FRACTIONS: DECIMALS: ANGLES: TOLERANCE: ± 1/64 .0004 ± .030

REMOVE ALL SHARP BREAK EDGES .005 TO .015 FILLETS R .005 TO R .030 SMOOTH SURFACES PER MIL-C-8879 DIA'S ON A COMMON Ø .0005 MACHINED SURFACES 125°

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

3-ELEMENT
 5 CHANNEL PASSIVE L1/L2 GPS
 CLU NLOS ANTENNA ARRAY
 (1 RHCP, 2E, & 2 H)

DESIGNED BY: S. HUYNH
 M. BOAS
 Mar-07-05

APPROVED BY: S. HUYNH
 M. BOAS
 Mar-07-05

FIG. NO: D 3CVE1
 PART NO: 3NF-4.7CG1215P2L-XS-4
 SCALE: 1/1
 SHEET: 1 OF 1