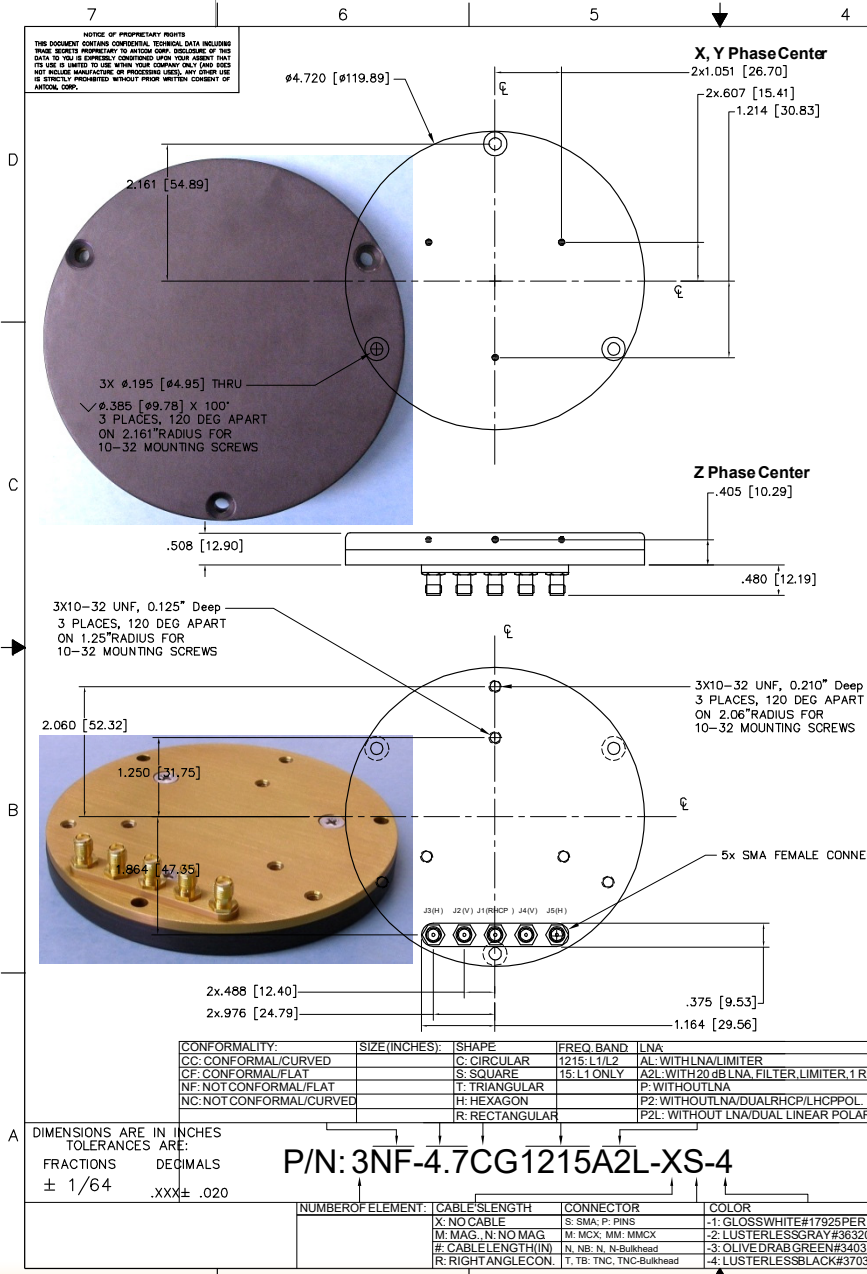


3-Element-5-Channel (1 RHCP, 2 E/2 H) CRPA L1/L2 GPS Antenna Array (4.72" Dia. x 0.508" Thick), P/N: 3NF-4.7CG1215A2L-XS-4 Rev F (Active)

“-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

Wide Band GNSS Option Is Available



SPECIFICATIONS		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED
ELECTRICAL:				
FREQUENCY:		L1: (1575.42 ±15) MHz		
RADIATION PATTERN:		L2: (1227.60 ±15) MHz		
POLARIZATION:		HEMISPHERICAL		
VSWR:		RHCP < 1.5:1		
IMPEDANCE:		50 ohms		
ANTENNA ELEMENT GAIN (dBic):		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 +0.9 -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		
LNA GAIN OPTION:		21 dB		
LNA NOISE FIGURE:		3.0 dB		
LNA P1dB Out:		+15 dBm		
LNA DC POWER:		(2.5 to 24) Volts dc @ <25 mA for each Port		
REJECTION @ (-50/+50) MHz:		-41 dB / -59 dB -40 dB / -40 dB		
@ (-100/+100) MHz:		< -65 dB < -65 dB		

MECHANICAL:	
SIZE:	DIAMETER: 4.72 in [119.89 mm] HEIGHT: 0.508 in. [12.90 mm]
WEIGHT:	<14oz. (397 g)
FINISH:	SKYDROLRESISTANTPOLYURETHANENAMEL BASEIRIDITEPERMIL-C-5441
MATERIAL:	6061-T6ALUMINUMALLOY BASE COMPOSITE RADOME,IMPACT,ABRASION,UV, SOLVENT, SKYDROLRESISTANCEAND 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:	HERMETICALLYSEAL

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	ITEM NO
4	-	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	5
A/R	-				3
1	1				1
-2	-1				

CONFORMALITY:	SIZE (INCHES):	SHAPE	FREQ. BAND	LNA
CC: CONFORMAL/CURVED	C: CIRCULAR	C: CIRCULAR	1215: L1/L2	AL: WITH LNA/LIMITER
CF: CONFORMAL/FLAT	S: SQUARE	S: SQUARE	15: L1 ONLY	A2L: WITH 20 dB LNA, FILTER, LIMITER, 1 RHCP, 2E, & 2HPOL
NF: NOT CONFORMAL/FLAT	T: TRIANGULAR	T: TRIANGULAR		P: WITHOUT LNA
NC: NOT CONFORMAL/CURVED	H: HEXAGON	H: HEXAGON		P2: WITHOUT LNA/DUAL RHCP/LHCP/POL
	R: RECTANGULAR	R: RECTANGULAR		P2L: WITHOUT LNA/DUAL LINEAR POLARIZATION

P/N: 3NF-4.7CG1215A2L-XS-4

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: NO MAG	M: MCX: 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	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .0006 .030

TOLERANCE SYM PER ANS Y14.5

REWORK ALL SURFACES BRING EXTERNAL EDGES .005 TO .015

FORMING SURFACES PER MIL-STD-883C

DATE: 08-24-2006

MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

3-ELEMENT ACTIVE L1/L2 GPS CIRCULAR ANTENNA ARRAY (1 RHCP, 2E, & 2 H)

DESIGNED BY: S. HUYNH Aug-07-06

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