



FAA Approved Facility

2-Element-4-Channel (RHCP/LHCP) CRPA L1/L2 GPS Antenna Array

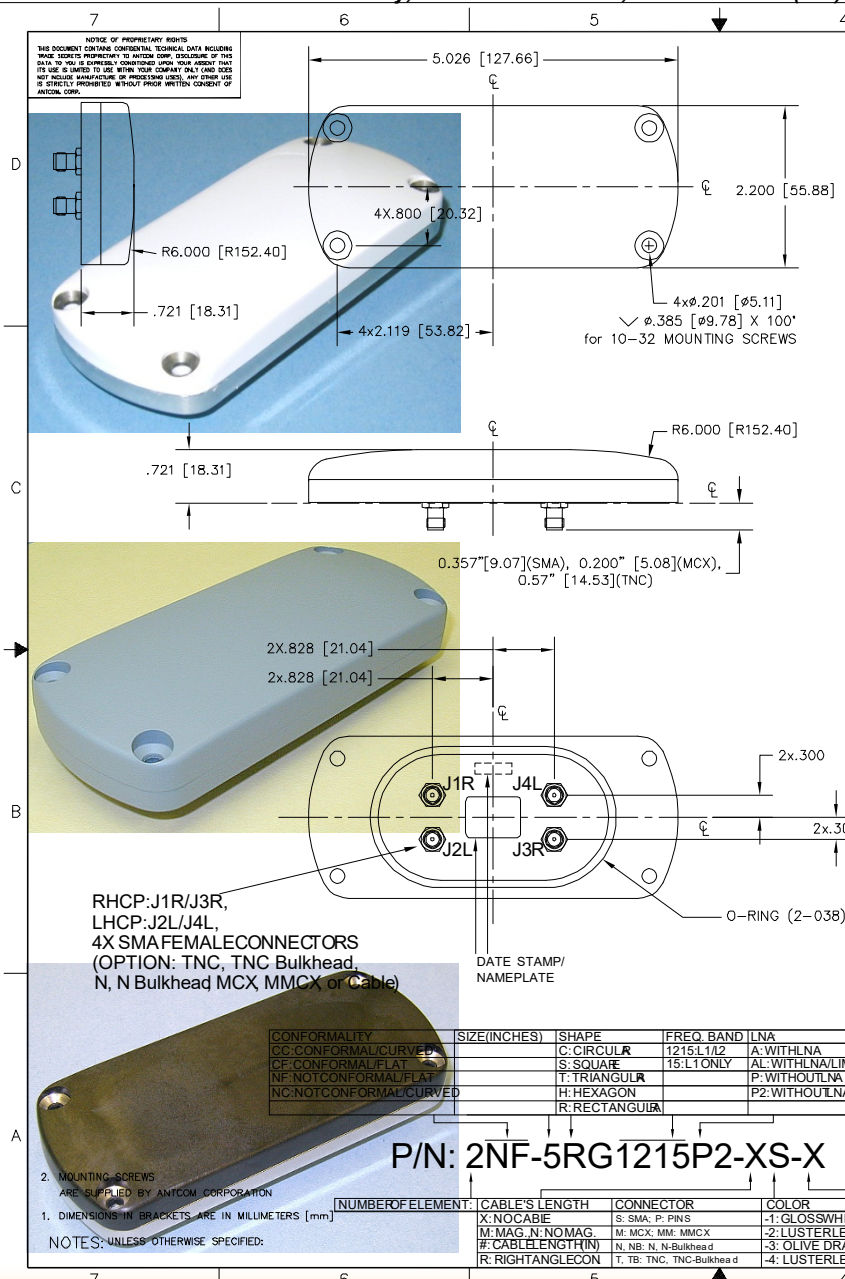
(5.03"x2.2"x0.72"), P/N: 2NF-5RG1215P2-XS-X

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



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Wide Band GNSS Option Is Available



SPECIFICATIONS

ELECTRICAL:		REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED			
FREQUENCY:		L1: (1575.42 ±15) MHz		L2: (1227.60 ±15) MHz			
RADIATION PATTERN:		HEMISPHERICAL					
POLARIZATION:		RHCP/LHCP			RHCP/LHCP		
VSWR:		< 1.5:1					
IMPEDANCE:		50 ohms					
ANTENNA ELEMENT GAIN (dBic):		Free Space	16 in G.P.	4 ft G.P.	Free Space	16 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):		+ 4.6	+ 0.3	+ 2.9	+ 1.8	+ 1.9	+ 5.3
@ 10 ° Elevation:		- 2.5	- 3.1	- 1.8	- 4.2	- 3.1	- 2.3
@ 20 ° Elevation:		- 1.1	- 1.1	+ 0.7	- 2.9	- 1.1	+ 0.4
@ 30 ° Elevation:		+ 0.5	+ 0.9	+ 1.7	- 2.0	+ 0.5	+ 2.3
@ 60 - 90 ° Elevation:		> 3.6	+ 3.1/+ 0.3	> 2.1	> 0.9	+ 3.1/+ 1.9	> 3.2
BEAM WIDTH (3dB):		103 Deg.	120 Deg.	146 Deg.	108 Deg.	120 Deg.	74 Deg.
AXIAL RATIO:		2 dB					
NULL DEPTH:		>30 dB (Analog), 55-60 dB (Digital)					
LNA OPTION:							
LNA GAIN:		33 dB			35 dB		
LNA NOISE FIGURE:		3.0 dB			3.0 dB		
LNA P1dB Out:							
LNA DC POWER:		2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA					
REJECTION @ (-50/+50) MHz:		-41 dB / -59 dB					
@ (-100/+100) MHz:		< -65 dB					
POWER HANDLING:		1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)					

MECHANICAL:

SIZE: WIDTH: 2.20 in. [55.88 mm], LENGTH: 5.026 in [127.66 mm], HEIGHT: 0.721 in. [18.31 mm]
WEIGHT: 8.0 oz. (226 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: 4 SMA FEMALES: RHCP PORTS: J1R, J3R, LHCP PORTS: J2L, J4L (OPTION: SMA, 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

QUANTITY	REQD	DESCRIPTION	PART NO	FINISH	REV
4	-	MOUNTING SCREWS for -PL- ONLY: (10-32, 3/4")	MS24693C274	-	5
4	-	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	4
A/R	-	WASHER, CUSTOM C'SINK	3G15P1001-6	-	3
1	-	O-RING	2-038/N756-75	-	1

CONFORMALITY	SIZE (INCHES)	SHAPE	FREQ. BAND	LNA
CC: CONFORMAL CURVED	1215L1A2	C: CIRCULAR	15:L1 ONLY	A: WITH LNA
CF: CONFORMAL FLAT		S: SQUARE		AL: WITH LNA/LIMITER
NF: NOT CONFORMAL FLAT		T: TRIANGULAR		P: WITHOUT LNA
NC: NOT CONFORMAL CURVED		H: HEXAGON		P2: WITHOUT LNA, DUAL POLARIZATIONS
		R: RECTANGULAR		

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2. MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS (mm)
 NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 FRACTIONS: DECIMALS: ANGLES: ± 1/64 .005 .005 ± 1°
 TOLERANCE SHIP PER AMS 1715
 BREAK EXTERNAL EDGES .005 TO .015
 FILE TO .0005 TO .001
 DATE OF A CHANGE 6/27/00
 MACHINED SURFACES
 DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA
 2 ELEMENT L1L2 GPS RHCP-LHCP ANTENNA ARRAY
 D 3CVE12NF-5RG1215P2-XS-X
 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