



FAA Approved Facility

# Dual Polarization (RHCP/LHCP) L1/L2 GPS Antenna

P/N: 42G1215RL-AA-5SSF-1

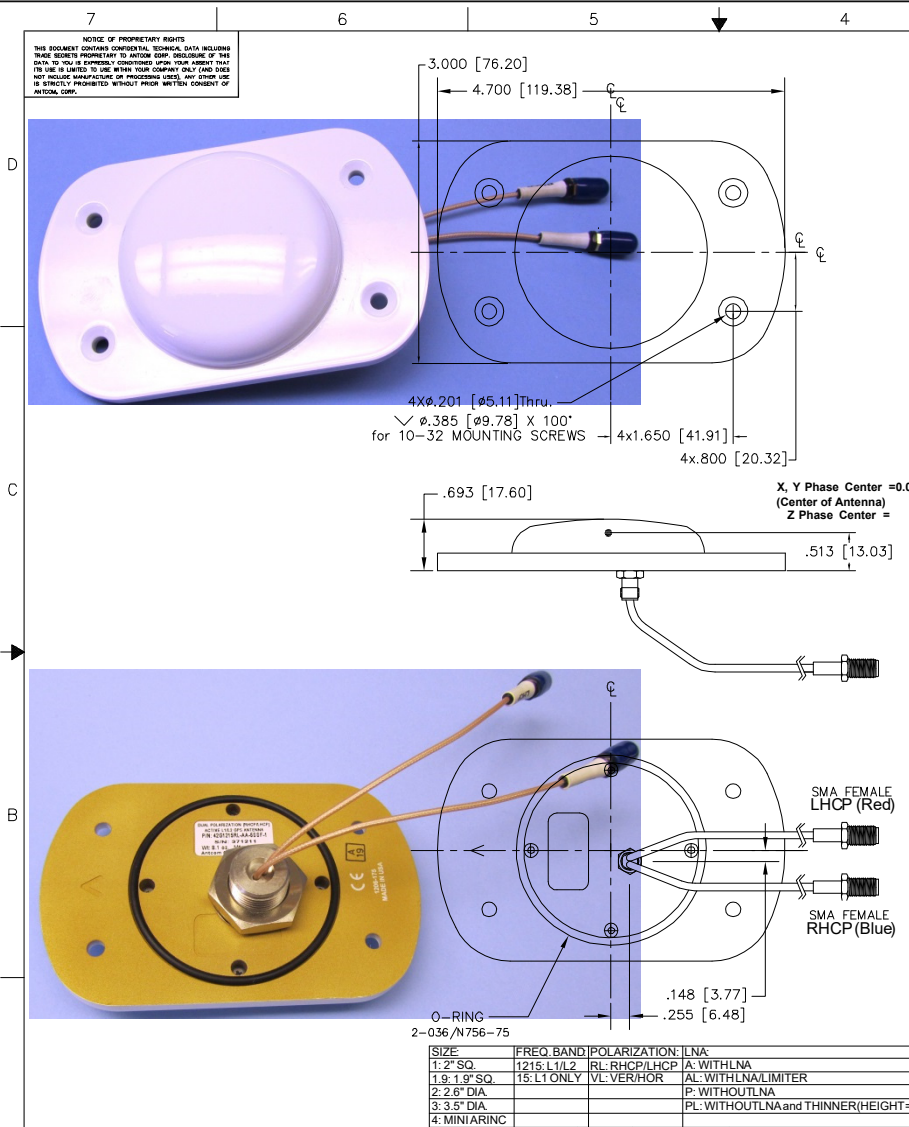
(4.7" x 3.0") 743 Arinc Configuration

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



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Wide Band GNSS Option Is Available



## SPECIFICATIONS

### ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP/LHCP	RHCP/LHCP
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNAGAIN (dBi):	Free Space	4 ft G.P.
@ 90° (ZENITH):	+4.7	+3.5
@ 10° Elevation:	-1.8	-2.0
@ 20° Elevation:	-0.3	+0.8
@ 30° Elevation:	+1.4	+1.8
@ 60-90° Elevation:	>3.9	>2.7
BEAMWIDTH(3dB):	114 Deg.	139 Deg.
AXIAL RATIO:	2 dB	2 dB
LIGHTNINGPROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	35 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA	
POWERHANDLING	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)	

### MECHANICAL:

SIZE: WIDTH: 3.00 in. [76.20 mm], LENGTH 4.700 in. [119.38 mm], HEIGHT: 0.6930 in. [17.60 mm]

WEIGHT: 6.8 oz. (191 g)

FINISH: SKYDROLRESISTANTPOLYURETHANENAMEL BASE IRIDIUM PER MIL-C-5441

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROLRESISTANCE AND FIRE RETARDANT

CONNECTOR: 2x 5in SMA FEMALE CABLES (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

QUALIFIED TO: FAA TSO-C144, DO-160D: E1-CBX(S)XSFDXSXXXXXX(XCX)(C)

### ACCEPTANCE TEST PROCEDURE

QUANTITY	DESCRIPTION	PART NO	FINISH	REF NO
5				
4	MOUNTING SCREW: (10-32, 1")	MS24693C276		5
3				4
1	0-RING	2-036/N756-75		1

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2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

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 FRACTIONS DECIMALS ANGLES TOLERANCES ARE: ± 1/64 .005 .005 ± 1°

TOLERANCE SIM PER ANS Y14.5 REMOVE ALL BURRS BREAK OFF EXCESS .005 TO .015 FILETS IN .005 TO R .005 SPEC IF THIS FOR ALL .5-8879 DATS ON A COMMON .5-2005 MACHINED SURFACES DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

743 Arinc  
RHCP/LHCP ACTIVE L1/L2  
GPS ANTENNA

APPROVED: S. HUYNH 01-05-29

DATE: 01-05-29

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