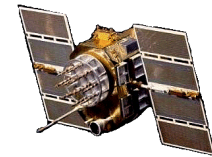




Dual Polarization (RHCP/LHCP) L1/L2 GPS Antenna

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

(4.7" x 3.0") 743 Arinc Configuration



ISO 9001:2008/FAA Approved Facility

Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

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SIZE:
1: 2" SQ.
1.9: 1.9" SQ.
2: 2.8" DIA.
3: 3.5" DIA.
4: MINI ARINC

FREQ. BAND:
1215: L1/L2
15: L1 ONLY

POLARIZATION:
RL: RHCP/LHCP
VL: VER/HOR

LNA:
A: WITH LNA
AL: WITH LNA LIMITER
P: WITHOUT LNA
PL: WITHOUT LNA and THINNER (HEIGHT = 0.58")

CONNECTOR:
S: SMA, P: PINS
M: MMCX, M: MMCX
N: N, N: Bulkhead
T: TNC, TNC: Bulkhead

COLOR:
-1: GLOSS WHITE #17925 PER FED-STD-595B
-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP/LHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	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
BEAM WIDTH (3dB):	114 Deg.	139 Deg.
AXIAL RATIO:	2 dB	
LIGHTNING PROTECTION:	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	
POWER HANDLING:	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: 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: 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-CB(X)SXSFDX SXXXXXXXX (XXCX) (C)

ACCEPTANCE TEST PROCEDURE ATP-GPS-L1L2-100

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

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:
FRACTIONS: DECIMALS: ANGLES: ± 1/64 .001 .015 ± 1°

TOLENCES: SIM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
BREAK INTERNAL EDGES .005 TO .015
Screw threads per MIL-STD-8839
DIM'S ON A COMMON END OF PART
MACHINED SURFACES ✓
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA
743 Arinc
RHCP/LHCP ACTIVE L1/L2
GPS ANTENNA

REV: 1
DATE: 01-05-29
SCALE: 1/1
SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas