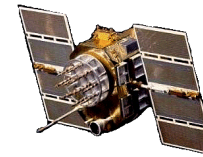




# Antcom's Active L1/L2 GPS Antenna

P/N: 743G1115A-XT-1

Avionics Arinc 743 Configuration Also available in 1G, 2G, 3G Configurations



ISO 9001:2008/FAA Approved Facility

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

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### SPECIFICATIONS

ZONE	REV	REVISIONS			
		DESCRIPTION	DATE	APPROVED	

FREQUENCY:	L5 GPS		OmniSTAR / L-Band		L1 GPS		L1 GLONASS	
	E5, E5a, E5b Galileo L5 IRNSS	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz	L6 Galileo B1 Compass	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	E1, E2 Galileo L1 IRNSS	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	1609 ± 7.0 MHz	
RADIATION PATTERN:	HEMISPHERICAL							
POLARIZATION:	RHCP		RHCP		RHCP		RHCP	
VSWR:	< 2.0:1		< 2.0:1		< 2.0:1		< 2.0:1	
IMPEDANCE:	50 ohms		50 ohms		50 ohms		50 ohms	
ANTENNA Ave. GAIN (dBic):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.
@ 90° (ZENITH):	+5.0	+6.0	+2.0	0.0	+2.0	0.0	+1.3	-0.5
@ 10° Elevation:	-1.8	-1.6	-3.7	-3.5	-3.9	-3.5	-4.4	-3.8
@ 20° Elevation:	0.0	+1.4	-2.4	-0.8	-2.5	-0.5	-3.1	-0.9
@ 30° Elevation:	+1.6	+3.7	-1.7	+0.9	-1.7	+0.7	-2.3	0.0
@ 60° Elevation:	+4.0	+4.5	+1.2	+0.3	+1.2	+0.1	+0.6	-1.1
BEAM WIDTH (3dB):	110 Deg.	120 Deg.	110 Deg.	145 Deg.	110 Deg.	150 Deg.	110 Deg.	150 Deg.
AXIAL RATIO:	1 dB	1 dB	1 dB	2 dB	1 dB	3 dB	3 dB	5 dB
LIGHTNING PROTECTION:	DC GROUNDING							
LNA GAIN:	35 dB							
LNA NOISE FIGURE:	2 dB							
LNA P1dB Out:	+13 dBm							
LNA DC POWER:	(2.5 to 24)V / < 50 mA							
POWER HANDLING:	10 Watt with Limiter							

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

NOTES: UNLESS OTHERWISE SPECIFIED:

### MECHANICAL:

**SIZE:** WIDTH: 3.00 in. [76.20 mm], LENGTH 4.700 in. [119.38 mm], HEIGHT: 0.898 in. [22.80 mm]

**WEIGHT:** 9.36 oz. (265 g)

**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5541F CLASS 1A

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

**CONNECTOR:** TNC TYPE FEMALE  
(OPTION: SMA, BNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX)

### 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:

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

P/N: 743G1115A-XT-1

SIZE:	LNA:	QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	PLU NO
1: 2" SQ	A: WITH LNA	4	Mounting Screw: 10-32, 1"		MS24693C276		5
1.9: 1.9" SQ	P: WITHOUT LNA						4
2: 2.6" DIA							3
3: 3.5" DIA							2
4: MINI ARINC: 42, 743, 743 ARINC.		1	O-Ring or Gasket		2-142/N756-75		1
52: 2.6" DIA. ON 5" GROUND PLANE							
72: 7" DIA. CHOKE RING							

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

NMO Connector Option is Now Available for Some Antennas

ANTCOM CORP. TORRANCE, CALIFORNIA

743 ARINC, ACTIVE L1/L5 GPS ANTENNA

DATE: 03/01/11  
DRAWN: D3C/E1  
CHECKED: S. HUYNH  
DESIGNED: S. HUYNH  
APPROVED: July-03-10

FILE NO: 743G1115A-XT-1  
SCALE: 1/1  
SHEET: 1 OF 1