



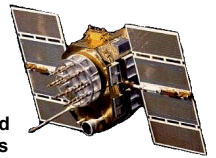
TSO Cert Active L1/L2 GPS Antenna, P/N: 42G1215A-XT-1

Also Know as P/N: ANT-A72GA-TW-N

(4.7" x 3.0") 743 Arinc Configuration



FAA Approved
TSO Antennas



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>

NOTICE OF PROPRIETARY RIGHTS
THIS DOCUMENT CONTAINS CONFIDENTIAL, TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY CONTINGENT UPON YOUR AGREEMENT TO HOLD ANTCOM PROPRIETARY TO YOU. ANTCOM CORP. SHALL NOT BE HELD LIABLE FOR ANY DAMAGES OR LOSSES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM THE USE OF THIS DOCUMENT. YOUR USE IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

4.700 [119.38]
3.000 [76.20]
4x.800 [20.32]
R2.350 [R59.69]
φ2.600 [φ66.04]
4xφ.201 [φ5.11] Thru.
✓ φ.385 [φ9.78] x 100'
for 10-32 MOUNTING SCREWS

X, Y Phase Center = 0.0 (Center of Antenna)
Z Phase Center = .513 [13.03]

NAMEPLATE APPROXIMATE LOCATION
DATE STAMP APPROXIMATE LOCATION AS SHOWN

0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

φ2.362 [φ59.99]
.255 [6.48]

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:

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
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	> 2.8
BEAM WIDTH (3dB):	114 Deg.	139 Deg.
AXIAL RATIO:	2 dB	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	
REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB	-40 dB / -40 dB
@ (-100/+100) MHz:	< -65 dB	< -65 dB
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: TNC FEMALE
(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) XSFDXSXXXXXXXX (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

SIZE	FREQ BAND	LNA
1.9: 1.9" SO.	1215: L1/L2	A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS
2: 2.6" DIA	15: L1 ONLY	AL: WITH LNA LIMITER
3: 3.5" DIA		P: WITHOUT LNA
4: MINI ARINC		PL: WITHOUT LNA and THINNER (HEIGHT = 0.58")
42: 743 ARINC		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

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
F: CABLE LENGTH IN	N: N; 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

ANTCOM CORP. TORRANCE, CALIFORNIA

743 Arinc,
L1/L2 ACTIVE, OR PASSIVE
GPS ANTENNA

DATE: 01-05-29
DRAWN: M. BOAS
CHECKED: S. HUYNH
APPROVED: S. HUYNH

SCALE: 1/1
SHEET: 1 OF 1

NMO Connector Option is Now Available for Some Antennas