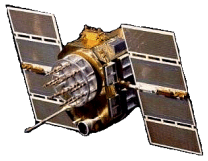
Active or Passive L1 GPS Antenna, P/N: 42G15X-XX-X:
(4.7” x 3.0”) 743 Arinc Configuration



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

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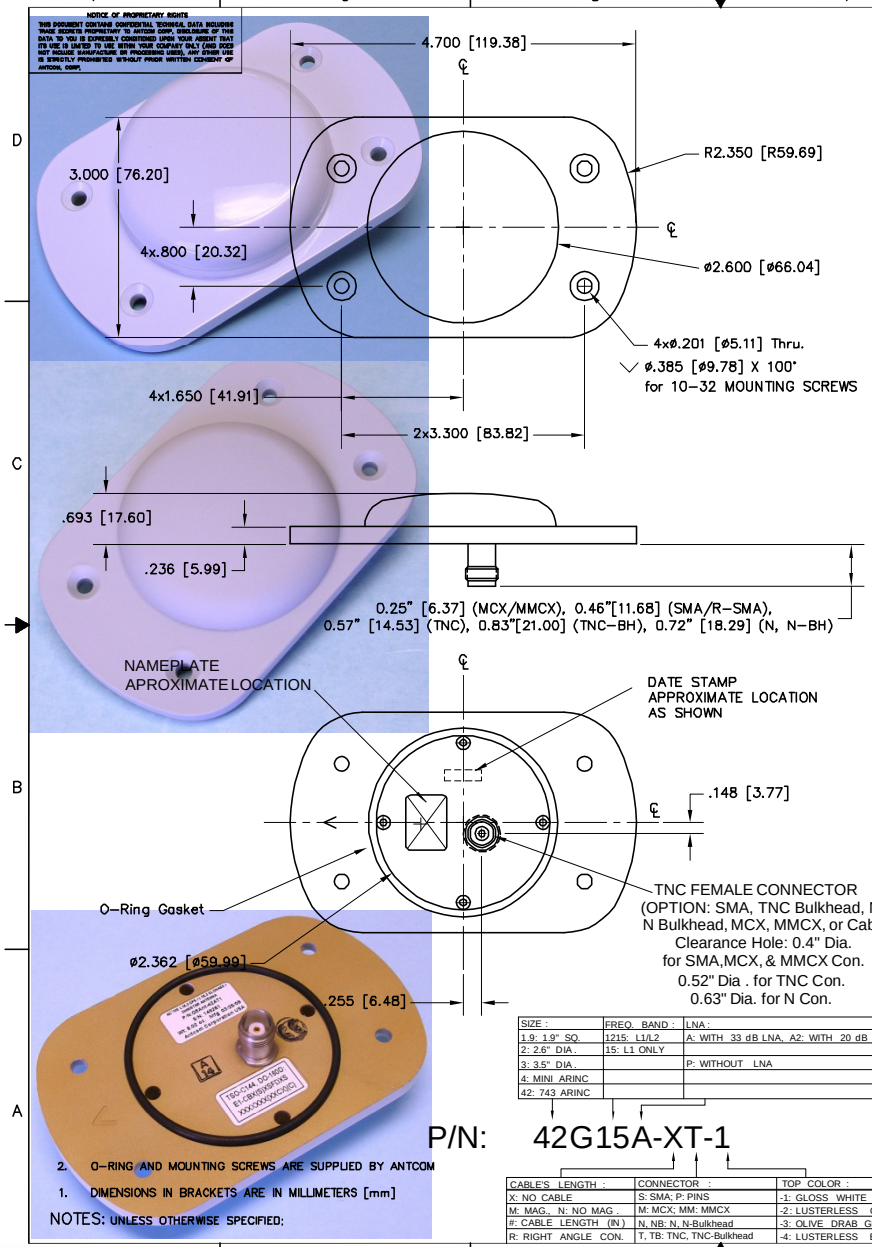

SIZE :	FREQ. BAND :	LNA :
1.9: 1.9" SQ.	1215: L1/L2	A: WITH 33 dB LNA, A2: WITH 20 dB LNA, A4: WITH 40 dB LNA
2: 2.6" DIA.	15: L1 ONLY	
3: 3.5" DIA.		P: WITHOUT LNA
4: MINI ARINC		
42: 743 ARINC		

P/N: 42G15A-XT-1

CABLE'S LENGTH :	CONNECTOR :	TOP 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

2. O-RING AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
NOTES: UNLESS OTHERWISE SPECIFIED:

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	WEIGHT, P/N	JUNE-25-04	S.H

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz			
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP			
VSWR:	< 1.5:1			
IMPEDANCE:	50 ohms			
ANTENNA GAIN (dBic):	Free Space	16 in G.P.	4 ft G.P.	
@ 90 ° (ZENITH):	+ 4.6	+ 0.3	+ 2.9	
@ 10 ° Elevation:	- 2.5	- 3.1	- 1.8	
@ 20 ° Elevation:	- 1.1	- 1.1	+ 0.7	
@ 30 ° Elevation:	+ 0.5	+ 0.9	+ 1.7	
@ 60 - 90° Elevation:	> 3.6	+3.1/+03	> 2.1	
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.	
AXIAL RATIO:	2 dB			
LIGHTNING PROTECTION:	DC GROUNDING			
LNA GAIN:	33 dB			
LNA NOISE FIGURE:	2.2 dB			
LNA P1dB Out:	+13 dBm			
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/<30mA			
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB			
@ (-100/+100) MHz	< -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:	7.0 oz. (198 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL WITH NICKEL PLATED BASE
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:

DESIGN TO: 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

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO
	PARTS LIST			
			-	5
4	MOUNTING SCREW: (10-32, 1")	MS24693C276		4
			-	3
1	O-RING	2-036/N756-75	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS ± 1/64, DECIMALS .XX ± .01, .XXX ± .009, ANGLES ± 1°. TOLERANCE SYM PER ANSI Y14.5. REMOVE ALL BURRS. BREAK EXTERNAL EDGES .005 TO .015. FILLETS R .010 TO R .030. SCREW THREADS PER MIL-S-8879. DIA'S ON A COMMON ℄ Ø".005. MACHINED SURFACES 125. DO NOT SCALE DRAWING

DRAWN
CHECKED M. BOAS 01-05-29
ENGINEER
APPROVED S. HUYNH 01-05-29
CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

743 Arinc, L1 ACTIVE GPS ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 42G15A-XT-1 | REV A

SCALE 1/1 | SHEET 1 OF 1