



NOTICE OF PROPRIETARY RIGHTS
THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORPORATION. REPRODUCTION OF THIS DATA TO YOU IS EXPRESSLY CONDITIONED UPON YOUR AGREEMENT THAT ITS USE IS LIMITED TO THE USE WITHIN YOUR COMPANY ONLY AND SUCH USE IS STRICTLY PROHIBITED BY PROVISIONAL LICENSE. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

MECHANICAL:
SIZE: DIAMETER: 3.50 in. [88.90 mm]
HEIGHT: 0.690 in. [17.53 mm] (for Active), 0.58" [14.73] (for Passive)
WEIGHT: 6.5 oz. (184.3 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 SEALED
FEDERAL & MILITARY SPECIFICATIONS
DESIGN TO: FAA TSO-C144, DO-160D, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810 AND SAE J1455
ACCEPTANCE TEST PROCEDURE ATP-GPS-L1L2-100

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
4	-	MOUNTING SCREWS: 10-32, 3/4"	J507C1032R12, or 93085A831	5
A/R	-	WASHER, CUSTOM C'SINK	3G15P1001-70	3
1	1	O-Ring, or GASKET	2-031/N756-75, OR 3G15P1001-3G	1

QUANTITY REQUIRED

QTY	DESCRIPTION	PART NO	REV
1	O-Ring, or GASKET	2-031/N756-75, OR 3G15P1001-3G	1

PARTS LIST

QTY	DESCRIPTION	PART NO	REV
4	MOUNTING SCREWS: 10-32, 3/4"	J507C1032R12, or 93085A831	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-70	3
1	O-Ring, or GASKET	2-031/N756-75, OR 3G15P1001-3G	1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS DECIMALS ANGLES
± 1/64 .001 ± .005 ± 1°

ANTCOM CORP. TORRANCE CALIFORNIA
3.5" Dia.
L1 ACTIVE GPS ANTENNA

DESIGNER: M. BOAS 01-05-29
CHECKED: S. HUYNH 01-05-29
DATE: 01-05-29
SCALE: 1/1
SHEET 1 OF 1

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):	+ 5.4 + 2.2 + 4.6
@ 10 ° Elevation:	- 1.3 - 2.4 - 1.0
@ 20 ° Elevation:	+ 0.4 - 0.3 + 1.4
@ 30 ° Elevation:	+ 1.8 + 1.7 + 1.5
@ 60 - 90 ° Elevation:	> 4.5 +4.6/+22 > 2.7
BEAMWIDTH(3dB):	109 Deg. 115 Deg. 136 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING

LNA OPTION

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: DIAMETER: 3.50 in. [88.90 mm]
HEIGHT: 0.690 in. [17.53 mm] (for Active), 0.58" [14.73] (for Passive)
WEIGHT: 6.5 oz. (184.3 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 SEALED
FEDERAL & MILITARY SPECIFICATIONS
DESIGN TO: FAA TSO-C144, DO-160D, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810 AND SAE J1455
ACCEPTANCE TEST PROCEDURE ATP-GPS-L1L2-100

SIZE

SIZE	FREQ BAND	LNA
1: 2" SQ	1215, L1/L2	A: WITH 33 dB LNA, A2: WITH 20 dB LNA, A4: WITH 40 dB LNA
1.9: 1.9" SQ	15: L1 ONLY	
2: 2.6" DIA		P: WITHOUT LNA
3: 3.5" DIA		
4: MINIARINC		

CABLE LENGTH

CABLE LENGTH	FEMALE CONNECTOR	COLOR
X: NO CABLE	S: SMA, R: R-SMA, P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG, N: NOMAG	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

NOTES: UNLESS OTHERWISE SPECIFIED:
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM

P/N: 3G15A-XT-1-C