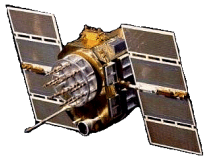
L1 GPS Antennas, P/N: 1.5G15X-XX-X:
1.5” Square, Back Mount Configuration



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

ANTCOM CORPORATION . 367 Van Ness Way, Suite 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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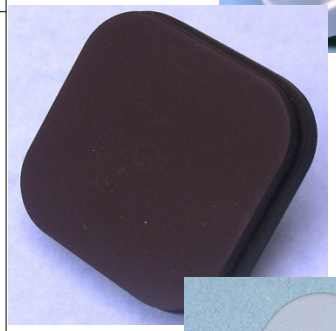

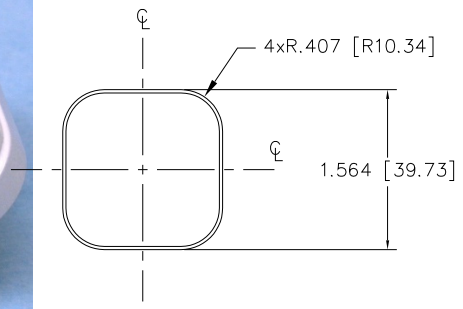

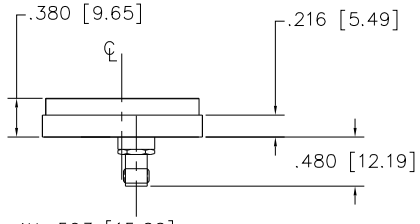

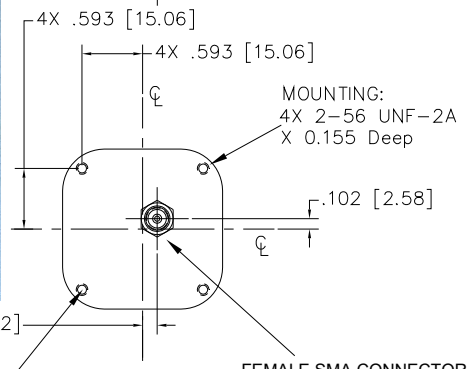

SPECIFICATIONS

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/+0.3	> 2.1
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.
AXIAL RATIO:	2 dB		
LIGHTNING PROTECTION:	DC GROUNDING		

LNA (OPTION):

LNA GAIN:	22 dB
LNA NOISE FIGURE:	2.6 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	(3-10) Volts/ 20mA
POWER HANDLING:	1 Watt CW

MECHANICAL:

SIZE:	1.57in Square HEIGHT= 0.38 in. [9.7mm]
WEIGHT:	1.5 oz. (42.5 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
COLOR:	GLOSS WHITE #17925 PER FED-STD-595B LUSTERLESS GRAY #36320 PER FED-STD-595B OLIVE DRAB GREEN #34031 PER FED-STD-595B LUSTERLESS BLACK #37038 PER FED-STD-595B
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT
CONNECTOR:	FEMALE SMA CONNECTOR (TNC, N , OTHER CONNECTOR, OR CABLE IS OPTIONAL)

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

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

	SIZE:	FREQ. BAND:	LNA:
	1: 2" SQ.	1625: Tx/Rx	
	1.5: 1.5" SQ.	25: 2493 MHz	A: ACTIVE (WITH LNA)
	2: 2.6" DIA.	16: 1616 MHz	P: WITHOUT LNA
	3: 3.5" DIA.	15: 1575 MHz	
	4: MINI ARINC		

P/N: 1.5G15X-XS-X

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: N (Optional Bulkhead)	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TNC (Optional Bulkhead)	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

QUANTITY REQD	-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
		-			-	-	-	5
		-	ADHESIVE GASKET	12345G-3M-1.5G	-	-	-	3
					-			
					-	-	-	1

PARTS LIST

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R.005 TO R.030
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON ⌀ ⌀.005 M
MACHINED SURFACES 125/

ORIGINALLY DRAWN	S. HUYNH	Aug-27-03
ORIGINALLY DESIGNED	S. HUYNH	Aug-27-03
UPDATED	S. HUYNH	Oct-25-12
UPDATE DRAWN	P. TRAN	Oct-25-12
APPROVED	S. HUYNH	Oct-25-12

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

1.5” SQ. FLAT MOUNT
L1 GPS ANTENNA

SIZE	CAGE NO	DRAWING NO	REV
D	3CVE1	1.5G15X-XX-X	-

SCALE 1/1 SHEET 1 OF 1

ORIGINAL DOCUMENT INCH STAMP IS RED

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

NMO Connector Option is Now Available for Some Antennas