



# L1 GPS Antenna, P/N: 3.85DCG15P-2GPO-X

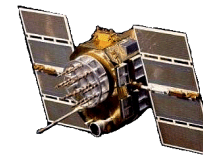
For Mortar Applications

(3.805in – 4.302in) Diameter x 2.094in. Height, 5.26in. SMP Cable

(Other Frequencies, Cone Angles, Diameters, Heights, Cable/Connector Can be Customized)

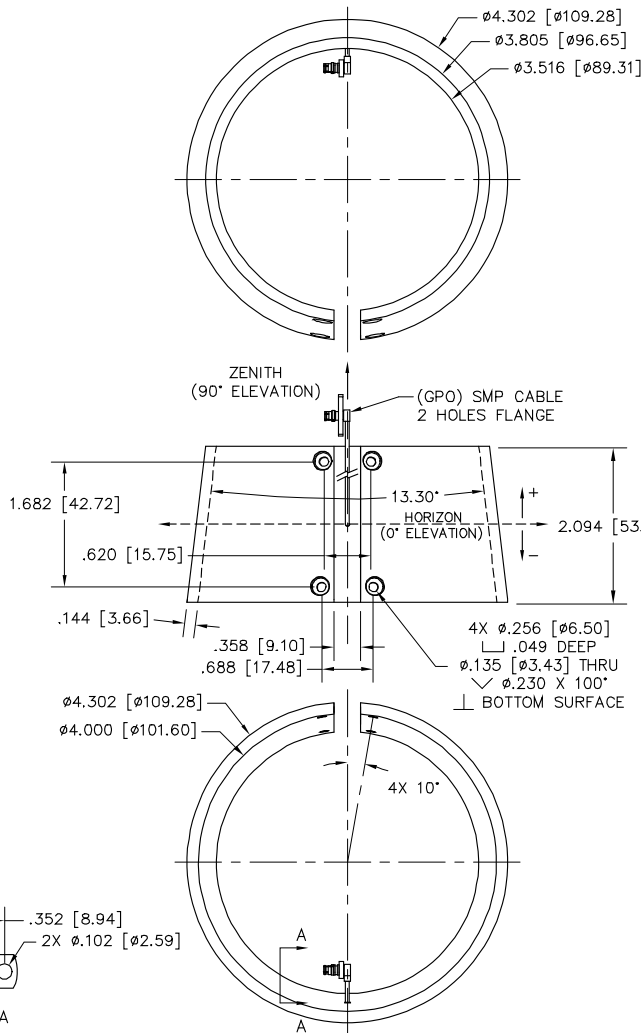
ISO 9001:2008/FAA Approved Facility

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](mailto:antennas@antcom.com) . <http://www.antcom.com>

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## SPECIFICATIONS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	

### ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	2:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	
HORIZON @ 0° Elevation:	+ 2.0
@ ±10° Elevation:	+ 1.8
@ ±20° Elevation:	+ 1.4
@ ±30° Elevation:	+ 0.3
@ ±45° Elevation:	- 0.5
@ ±60° Elevation:	- 3.0
@ ±70° Elevation:	- 3.0
@ + 90° (ZENITH):	- 2.0
BEAM WIDTH (3dB):	280 Deg.
AXIAL RATIO:	3 dB

### LNA OPTION (-A):

LNA GAIN:	(21.0±/-2.0) dB
LNA NOISE FIGURE:	1.8 dB
LNA P 1dB Out:	+16 dBm
VOLTAGE/CURRENT:	(+2.8 to +28) Volts DC / (15-25) mA

### MECHANICAL:

SIZE:	DIAMETER = (3.805 - 4.302) in. [96.65 - 109.28] mm HEIGHT = 2.094 in. [53.19] mm
WEIGHT:	3.2 oz. (91 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL
MATERIAL:	COMPOSITE HOUSING, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT
CONNECTOR:	(GPO) SMP 2 HOLES FLANGE CABLE (OPTION: SMA, QMA, SMB, N)

### ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
SHOCK:	FOR MORTAR APPLICATIONS
VIBRATION:	FOR MORTAR APPLICATIONS
LEAKAGE:	HERMETICALLY SEALED

### FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO:	FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-STD-810F, MIL-E-5400, MIL-I-45208A, SAE J1455 AND MIL-P-53022
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SIZE:	FREQUENCY (GHz):	LNA:	CONNECTOR:	COLOR:
1: 2" SQ.	1215; L1/L2	A: LNA	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	15: L1 ONLY	A2: 20 dB LNA	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA.		A4: 40 dB LNA	N: N; NB: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.		P: PASSIVE	T: TNC; TB: TNC-Bulkhead	-30: OLIVE DRAB GREEN #34088 PER FED-STD-595B
4: MINI ARINC			GPO: GPO SMP	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
				-5: TAN #33446 PER FED-STD-595B

P/N: 3.85DCG15P-2GPO-X

QUANTITY	DESCRIPTION	PART NO	FINISH	NEW
1	-	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	ANTCOM CORP. TORRANCE, CALIFORNIA
FRACTIONS: DECIMALS: ANGLES: ± 1/64 1000 1000 ± 1°	ORIGINAL DRAWN: S. HUYNH Dec-05-14
TOLERANCE .014 PER ANSI Y14.5	ORIGINAL DESIGNED: S. HUYNH Dec-05-14
REMOVE ALL BURRS	UPDATED: S. HUYNH Jan-14-16
BREAK EXTERNAL EDGES 0.015 TO .018	P. TRAN Jan-14-16
SIZE 8 THRU 10 PER MIL-S-8878	UPDATE DRAWN: S. HUYNH Jan-14-16
SIZE 11 THRU 14 PER MIL-S-8878	APPROVED: S. HUYNH Jan-14-16
SIZE 15 ON A CIRCLE ± .0005	
MACHINED SURFACES: $\sqrt{R}$	
DO NOT SCALE DRAWING	

SCALE	SCALE	SHEET
1/1	3.85DCG15P-2GPO-X	1 OF 1