



FAA Approved Facility

L1/L2/L5 GPS & Inmarsat/Iridium+L1/L2 Glonass Antennas

P/N: 3DG5A-XTM-1

1" Dia. x 4.2" Tall, Swivel, Side Mount Configurations

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



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1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
NOTES: UNLESS OTHERWISE SPECIFIED:

SPECIFICATIONS

ELECTRICAL:	REVISIONS						
	ZONE	REV	DESCRIPTION	DATE	APPROVED		
FREQUENCY (MHz):	(1575.42 ±13)	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1616)	(1616-1626)	(1227.60 ±13)	(1252.50 ±7.5)/ (1176.45 ±12)
GAIN (dBic)	L1 GPS	Rx INMARSAT	Tx INMARSAT	GLONASS	IRIDIUM	L2 GPS	L2 GLONASS/ L5 GPS
@ 90° (Zenith):	+2.9	+0.7	-1.6	+0.3	-1.2	0.0	-1.0
@ 10° Elevation:	-0.4	-2.8	-4.9	-3.1	-4.3	-2.4 to -6.3	-3.4 to -7.3
@ 20° Elevation:	+0.5	-1.7	-3.5	-1.7	-3.0	-1.8 to -4.8	-2.8 to -5.8
@ 30° Elevation:	+1.7	-0.7	-2.4	-0.7	-1.9	-1.3 to -3.4	-2.3 to -4.4
@ 45° Elevation:	+2.4	+0.2	-2.3	-0.1	-1.8	-0.5 to -1.5	-1.5 to -2.5
@ 70° Elevation:	+2.3	+0.6	-2.1	+0.2	-1.6	0.0 to -0.5	-1.0 to -1.5
BEAM WIDTH (3dB)	142 Deg.	140 Deg.	146 Deg.	144 Deg.	145 Deg.	(120 to 165) Deg.	(120 to 165) Deg.
AXIAL RATIO (dB)	1 to 3	1 to 4	1 to 3	1 to 4	1 to 3	1 to 5	1 to 5
RADIATION PATTERN:	HEMISPHERICAL						
POLARIZATION:	RHCP						
VSWR:	< 1.5:1						

DC GROUNDING: YES (LIGHTNING PROTECTION)

LNA OPTION:

LNA GAIN: (22.0+/-2.0) dB
LNA NOISE FIGURE: 2.8 dB (Filter loss is Included)
LNA P 1dB Out: +13 dBm
VOLTAGE/CURRENT: (+2.4 TO +5) Volts DC / (15 TO 30) mA
REJECTION: 2 2-POLE FILTERS FOR EACH BAND

MECHANICAL:

SIZE: DIAMETER: 1.00 in. [25.40 mm]
HEIGHT: 4.2 in. [106.68 mm]
WEIGHT: 1.715 oz (48.62 g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5441
COLOR: WHITE #17925 PER FED-STD-595B
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR: TNC MALE
(OPTION: MCX, SMA, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, QMA, 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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

FREQ. BAND	LNA	QTY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1215: L1/L2	A: WITH LNA	1						1
15: L1 ONLY	P: WITHOUT LNA	-2						
1216: L1/L2/INMARSAT/GLONASS/IRIDIUM		-1						
5: L1/L2/GPS/GLONASS/INMARSAT/IRIDIUM		-1						

P/N: 3DG5A-XTM-1

CABLE'S 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
#: 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

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS: DECIMALS: ANGLES
± 1/64 .001 .015 ± 1°
TOLERANCE .5MM PER ANSI Y14.5
FORM: ALL SURFACES
BEZEL EXTERNAL EDGES .000 TO .015
FILTS 2 TO 10 R .000
SIDE W. FURROWS PER MIL-S-8879
DAYS ON A CARRIER @ 20000
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA
HANDHELD L1/L2
GPS/INMARSAT/GLONASS/
IRIDIUM HELIX ANTENNA
DATE: 3/15/11H
REV: 08-12
SCALE: 1/1
SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas