



ISO 9001:2008/FAA Approved Facility

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

L1/L2/L5 GPS & Inmarsat/Iridium+L1/L2 Glonass Antennas, P/N: 3DG5A-XTM-X
 L1/L2 GPS Antenna P/N: 3DG1215X-XTM-X, L1/L2 GPS/Glonass Antenna P/N: 3DG1216X-XTM-X
 Rx Only Thuraya Antenna, P/N: 3DRxTA-XTM-X, Rx Only Inmarsat/Iridium Antenna, P/N: 3DRxINA-XTM-X
 Passive Rx/Tx Thuraya Antenna, P/N: 3DRxTxTP-XTM-X, Passive Rx/Tx Inmarsat/Iridium Antenna, P/N: 3DRxTxINP-XTM-X



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SPECIFICATIONS

ELECTRICAL:

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						

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

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

FREQ. BAND:	LNA:
1215: L1/L2	A: WITH LNA
15: L1 ONLY	P: WITHOUT LNA
1216: L1/L2/INMARSAT/GLONASS/IRIDIUM	
5: L1/L2/GPS/GLONASS/INMARSAT/IRIDIUM	

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 ARE IN 16THS
 DECIMALS ARE IN 100THS
 ANGLES
 ± 1/64
 .015
 .002 ± 1°

TOLERANCE .5M PER ANSI Y14.5
 REMOVE ALL BURRS
 BREAK EXTERNAL EDGES .005 TO .015
 FILED R .005 TO R .008
 SQUARE THREADS PER ANSI-B89
 DIA'S ON A CONE .625 TO .675
 MACHINED SURFACES .125

DO NOT SCALE DRAWING

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REQ NO
1	1					1
-2	-1					

PARTS LIST

ANTCOM CORP. TORRANCE, CALIFORNIA

HANDHELD L1/L2
 GPS/INMARSAT/GLONASS/
 IRIDIUM HELIX ANTENNA

DATE: 08-12
 DESIGNED BY: S. HUYNH
 CHECKED BY: S. HUYNH
 DRAWN BY: S. HUYNH

SCALE: 1/1

SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas