



High Gain Iridium/Inmarsat/GPS Helix Antenna, P/N: S63IR16RR-P-XT-1

High Gain Thuraya Helix Antenna, P/N: S63IR16LL-P-XT-1



ISO 9001:2008/FAA Approved Facility

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

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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

FREQUENCY (MHz):	(1227.60 ±15)	(1542.50 ±17.5)	(1575.42 ±15)	(1602-1616)	(1610-1626)	(1642.50 ±17.5)
GAIN (dBic) in FS	L2 GPS	Rx L-Band	L1 GPS	GLONASS	IRIDIUM	Tx INMARSAT
@ 90° (Zenith):	- 10.5	+ 0.6	+ 2.3	+ 2.1	+ 2.0	+ 0.4
@ 10° Elevation :	- 10.6	- 5.3	- 3.0	- 2.5	- 2.5	- 3.9
@ 20° Elevation :	- 9.3	- 3.1	- 0.8	- 0.6	- 0.6	- 2.0
@ 30° Elevation :	- 8.6	- 1.4	+ 0.7	+ 0.8	+ 0.7	- 0.7
@ 45° Elevation :	- 8.6	- 0.1	+ 1.8	+ 1.7	+ 1.6	+ 0.1
@ 70° Elevation :	- 9.9	+ 0.5	+ 2.2	+ 1.9	+ 1.7	0.0

AXIAL RATIO (dB) : 1 to 2
RADIATION PATTERN: HEMISPHERICAL
POLARIZATION: RHCP
VSWR: < 1.5:1
DC GROUNDING: YES (LIGHTNING PROTECTION)

SPECIFICATIONS

MECHANICAL:

SIZE: BASE DIAMETER= 3.50 in. [88.90 mm], HEIGHT = 6.550 in. [166.37 mm]

WEIGHT: < 8.0 oz. (226.7g)

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: TNC BULKHEAD CONNECTOR (OPTION: TNC, SMA, N, N Bulkhead, MCX, MMCX, or Cable)

MOUNTING: FLAT, OR FIXED PIPE (3/4"-1.0" Dia.) MOUNT (PROVIDED)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE: 70,000ft.
VIBRATION: > 30 G's
WIND SPEED: > 135 Miles/hr
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

QUANTITY

QTY	DESCRIPTION	PART NO	FINISH	REV
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	5
1				4
1	3G Neoprene-EPDM-Blend Gasket	3G15P1001-3G	-	3
1	VERTICAL/HORIZONTAL ANTENNA MOUNT	MTR-2	-	2
1	OPTIONAL VERTICAL ANTENNA MOUNT	MTR-1	-	1

PARTS LIST

QTY	DESCRIPTION	PART NO	FINISH	REV
1				1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS: DECIMALS: ANGLES: TOLERANCES: ± 1/64 ± .015 ± 1° ± .005 ± .010 ± .005

TOLERANCE 51M PER ANSI Y14.5

REWORK: ALL SURFACES BEING MACHINED SHALL BE TO 2016

FIELD: ALL DIMENSIONS FOR MIL-8-8879

DATE: ON A COMBINATION OF 2006

MACHINED SURFACES: 1/2

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

HIGH GAIN PIPE/FLAT MOUNT, IRIDIUM/GPS/GLONASS/INMARSAT HELIX ANTENNA

DESIGNED BY: S. HUYNH
APPROVED BY: S. HUYNH
DATE: DEC-03-03

SCALE: 1/1

SHEET: 1 OF 1

NMO Connector is Now Available for Some Antennas

CONFIGURATION:	POLARIZATION:	LNA:	CABLE LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ. (FLAT)	LL: TX: LHCP, RX: LHCP	A1: WITH +34 dB LNA	X: NO CABLE	S: SMA, P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	LR: TX: LHCP, RX: RHCP		M: WITH MAG. MOUNT	M: MCX, MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	RL: TX: RHCP, RX: LHCP	P: WITHOUT LNA	#: CABLE LENGTH (IN)	N: N; NB: N Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	RR: TX: RHCP, RX: RHCP		R: RIGHT ANGLE CON.	T: TNC; TB: TNC Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)					
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					
71: (HIGH GAIN HANDHELD HELIX)					
73: (HIGH GAIN HELIX)					

Back Mounting:
3x 10-32 Screws
0.250" Deep Equally Space
on 1.375 [34.94] Radius

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