High Gain **Iridium/Inmarsat/GPS** Helix Antenna
P/N: S73IR16RR-P-XX-X Rev B
3.5” Diameter x 6.6” Tall, Pipe/Flat Mount Configuration

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

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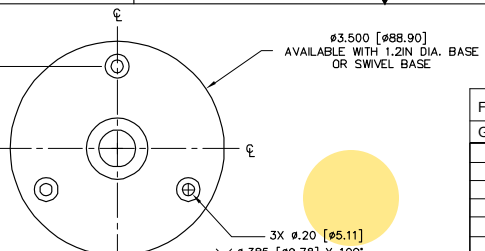
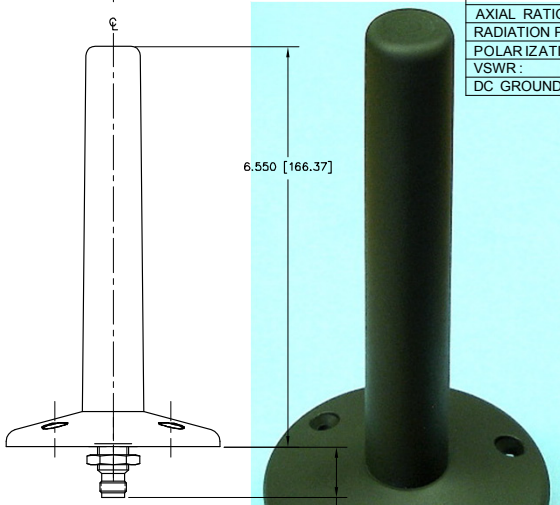
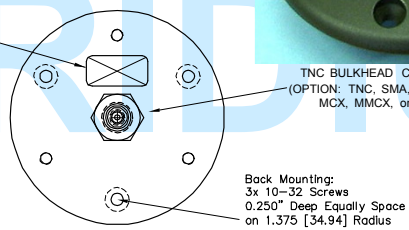
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED







SPECIFICATIONS

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	- 2.4	- 1.2	- 0.2	0.0	- 0.8
@ 10° Elevation :	- 10.6	- 2.5	- 1.3	- 0.3	- 0.1	- 0.9
@ 20° Elevation :	- 9.3	- 1.2	0.0	+ 1.0	+ 1.2	+ 0.4
@ 30° Elevation :	- 8.6	- 0.5	+ 0.7	+ 1.7	+ 1.9	+ 1.1
@ 45° Elevation :	- 8.6	- 0.5	+ 0.7	+ 1.7	+ 1.9	+ 1.1
@ 70° Elevation :	- 9.9	- 1.8	- 0.6	+ 0.4	+ 0.6	- 0.2

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

MECHANICAL:

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

WEIGHT: < 8.0 oz. (226.7 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: 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 SPPED: > 135 Miles/hr
LEAKAGE: HERMETICALLY SEALED

FEDERAL & MILITARY SPECIFICATIONS

DESIGNTO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541,
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

CONFIGURATION:	POLARIZATION:	LNA:	CABLE'SLENGTH	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 GIAN HANDHELD HELIX)					
73: (HIGH GIAN HELIX)					

P/N: S73IR16RR-P-XTB-1

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO
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

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. MACHINED SURFACES 125/
DO NOT SCALE DRAWING

DRAWN
CHECKED
ENGINEER
APPROVED S. HUYNH DEC-03-03
CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

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

SIZE D | CAGE NO 3CVE1 | DRAWING NO S73IR16RR-P-XTB-X | REV B

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas