



ISO 9001:2008/FAA Approved Facility

L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas

P/N: S53IR16RR-X-XX-X




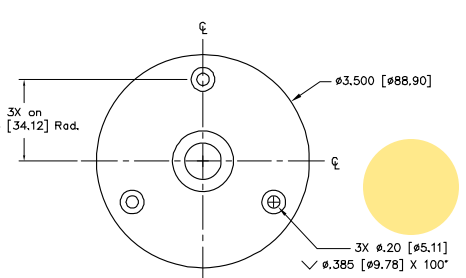
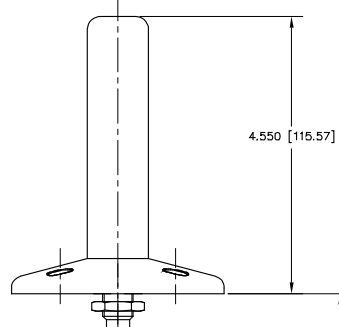
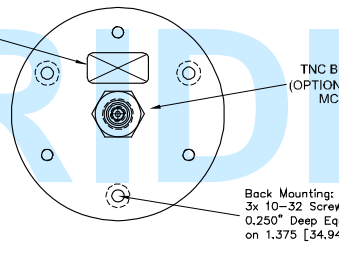
3.5" Diameter x 4.5" Tall, Pipe/Flat Mount Configurations

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



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ELECTRICAL:		SPECIFICATIONS				
FREQUENCY (MHz):	(1575.42 ±15)	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1616)	(1610-1626)	(1227.60 ±15)
GAIN (dBi) in FS/4ft GP	L1 GPS	Rx INMARSAT	Tx INMARSAT	GLONASS	IRIDIUM	L2 GPS
@ 90° (Zenith):	+1.1/+3.7	+0.7/+1.5	-0.3/0.0	+0.5/+2.9	+0.1/+1.1	-5.0
@ 10° Elevation:	-0.9/+0.0	-1.6/-1.3	-1.9/-1.0	-1.3/+0.2	-1.6/-0.8	-6.5 to -11.5
@ 20° Elevation:	-0.2/+2.0	-0.8/+1.0	-1.1/+1.2	-0.5/+2.4	-0.8/+1.2	-6.2 to -9.2
@ 30° Elevation:	+0.3/+2.0	-0.2/+1.0	-0.8/+0.4	+0.1/+2.1	-0.7/+1.1	-5.7 to -7.7
@ 45° Elevation:	+0.6/+1.5	+0.3/+0.6	-0.7/-0.8	-0.1/+1.0	-0.3/-0.3	-4.6 to -6.0
@ 70° Elevation:	+0.3/+1.3	+0.3/+0.4	-1.6/0.0	-0.3/+1.1	-0.7/0.0	-4.0
BEAM WIDTH (3dB)	173/155 Deg.	173/155 Deg.	180/162 Deg.	180/162 Deg.	180/162 Deg.	(107 to 170) Deg.
AXIAL RATIO (dB)	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 5
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP					
VSWR:	< 1.5:1					
DC GROUNDING:	YES (LIGHTNING PROTECTION)					
LNA GAIN: (Optional for L1 GPS only)	24.0 dB					
LNA NOISE FIGURE:	1.8 dB					
LNA P 1dB Out:	+16 dBm					
VOLTAGE/CURRENT:	(+2.8 TO +28) Volts DC / (15 TO 25) mA					
FILTER:	2-POLE FITLER (P/N: KFF6338A)					

MECHANICAL:	
SIZE:	DIAMETER = 3.50 in. [88.90 mm] HEIGHT = 4.690 in. [119.13 mm]
WEIGHT:	5.15 oz. (146 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:	70,000 ft.
VIBRATION:	> 30 G's
WIND SPEED:	> 135 Miles/hr
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

QTY	DESCRIPTION	PART NO	FINISH	REV
4	MOUNTING SCREWS (10-32, 1")	MS24693C276	-	5
1	ADHESIVE GASKET	12345G-3M-3G	-	3
1	VERTICAL/HORIZONTAL ANTENNA MOUNT	MTR-2	-	2
1	OPTIONAL VERTICAL ANTENNA MOUNT	MTR-1	-	1
-1	DESCRIPTION	PART NO	FINISH	REV

UNLESS OTHERWISE SPECIFIED	ANTCOM CORP. TORRANCE CALIFORNIA
DIMENSIONS ARE IN INCHES	PIPE/FLAT MOUNT, IRIDIUM/GPS/GLONASS/ INMARSAT HELIX ANTENNA
FRACTIONS TO BE DECIMALS UNLESS OTHERWISE SPECIFIED	
± 1/64	DATE: 30-03-03
TOLERANCE .001 PER ANSI Y14.5	DESIGNED BY: S. HUYNH
BREAK EXTERNAL EDGES .005 TO .015	CHECKED BY: S. HUYNH
FILED IN THE U.S. PATENT OFFICE	APPROVED BY: S. HUYNH
SCREW THREADS PER UNF-2-8879	DATE: DEC-03-03
DIA'S ON A COMMON 1/2" DIA.	CAD FILE NO:
MACHINED SURFACES .002	SCALE 1/1
DO NOT SCALE DRAWING	SHEET 1 OF 1

CONFIGURATION:	POLARIZATION:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ. (FLAT)	L: TX: LHCP, RX: LHCP	A: 24 dB LNA OPTION for L1 GPS ONLY	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9" SQ. (FLAT)	L: 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	R: 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 HAND-HELD)					

NOTES: UNLESS OTHERWISE SPECIFIED:
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

P/N: S53IR16RR-X-XTB-1

NMO Connector is Now Available for Some Antennas

CC: 3CVE1, NAICS: 334511, S.H, 2/19/2015

<http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf> (Amplifiers, Power Divider/Combiner, Filters, Diplexer)

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