



L1 or L1/L2 GPS & Inmarsat/Iridium/Glonass Antennas

P/N: S53IR16RR-X-XX-X

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

ISO 9001:2008/FAA Approved Facility

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



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3.500 [88.90]

3X 4.20 [106.11]

0.386 [9.78] X 100°

5X on 1.344 [34.12] Rad.

4.550 [116.51]

0.57" [14.53] (TNC), 0.72" [18.29] (N, N-Bulkhead), 0.46" [11.68] (SMA), 0.83" [21.00] (TNC-Bulkhead)

NAMEPLATE

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

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

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ELECTRICAL:

FREQUENCY (MHz):	(1575.42 ±15)	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1616)	(1610-1626)	(1227.60 ±15)
GAIN (dBc) In FS/4th 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:	-0.8/+0.0	-1.5/-1.3	-1.5/-1.0	-1.3/+0.2	-1.5/-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:	+0.8/+1.5	+0.3/+0.6	-0.7/+0.8	-0.1/+1.0	-0.3/-0.3	-4.5 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 [88.90 mm]
HEIGHT = 4.550 [116.13 mm]

WEIGHT: 5.15 oz. (146 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-3441

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 +65 °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, DO-228, MIL-C-6541,
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	-	3
1	ADHESIVE GASKET	123450-3M-30	-	5
1	VERTICAL/HORIZONTAL ANTENNA MOUNT	MTR-2	-	2
1	OPTIONAL VERTICAL ANTENNA MOUNT	MTR-1	-	1

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

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DO NOT SCALE DRAWING

DATE: 08/14/08
DRAWN BY: J. H. H. / J. H. H.
CHECKED BY: J. H. H. / J. H. H.
SCALE: 1/1"

ANTCOM CORP. TORRANCE, CA 90501
PIPE/FLAT MOUNT,
IRIDIUM/GPS/GLONASS/
INMARSAT HELIX ANTENNA

3CVE1 S53IR16RR-X-XTB-X

SCALE: 1/1"

SHEET 1 OF 1

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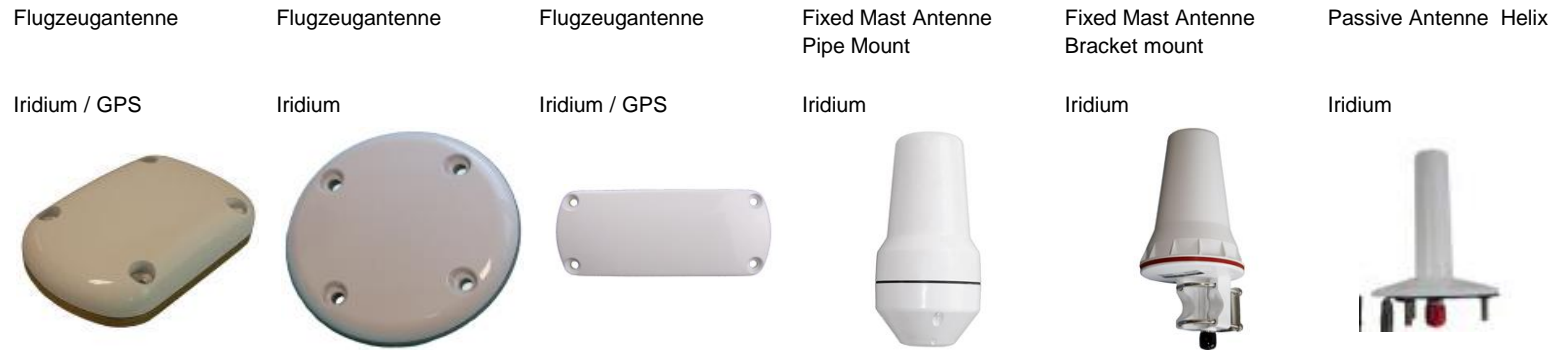
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NMO Connector Option is Now Available for Some Antennas

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

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

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Hersteller / Manufacturer	Aero Antenna Techn.	Antcom	Antcom	Aero Antenna Techn.	Aero Antenna Techn.	Antcom
Frequenz / Frequency	1610 - 1626.5 MHz	1610 - 1626.5 MHz	1610 - 1626.5 MHz	1616 - 1626 MHz	1616 - 1626 MHz	1610 - 1626 MHz
VSWR	<1.5:1	<1.5:1	<1.5:1	≤ 2.0 : 1	≤ 2.0 : 1	<1.5:1
Axialverhältnis / Axial Ratio	2 dB @ Zenit		2 dB @ Zenit	3 dB Max at Bore Sight	3 dB Max	3 dB Max
Radiation Coverage			+4.9 @ 90° -1.0 @ 10° +1.5 @ 20° +2.4 @ 30° >+3.3 @ 60°-90°	+0.04 dBic 0° = 0° +1.4 dBic 0° < θ < 45° -0.25 dBic 75° < θ < 82°	+0.04 dBic 0° = 0° +1.4 dBic 0° < θ < 45° -0.25 dBic 75° < θ < 82°	
Polarisation	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
Impedanz / Impedance	50 Ohm	50 Ohm		50 Ohm	50 Ohm	50 Ohm
Gewinn / Gain						
Anschluß / Connector	2 * TNC female	TNC female	2 * TNC female	TNC female	TNC female	TNC female
Kabeltyp				max 8 dB loss	max 8 dB loss	
Kabellänge						
Gewicht / Weight	140 gr	146 gr	237 gr	315 gr	227 gr	146 gr
Durchmesser / Diameter		88.9 mm		76 mm	83 mm	89 mm
Höhe / Height	19.56 mm ohne Anschlüsse; 28.96 mm mit Anschlüssen	14.81 mm	17 mm ohne Anschlüsse 32 mm mit Anschlüssen	162 mm	186 mm	119 mm
Größe (LxB)	87.40 x 55.63 mm		128 x 56 mm			
Temperaturbereich Operating Temp.	-55°C bis +85°C	-55°C bis +85 °C	-55°C bis +85°C	-40°C - +85°C	-40°C - +85°C	-55°C - +85°C
Schutzklasse Protection Class						
Einsatzgebiet Application area	Flugzeug / Airplane	Flugzeug / Airplane	Flugzeug / Airplane	Schifffahrt / Navigation	Schifffahrt / Navigation	dauerhafte Außeninstallation mit Kabellängen bis 50 m
	ohne TSO / without TSO	mit oder ohne TSO / with or without TSO	mitTSO / with TSO	dauerhafte Außenin- stallation / permanent outdoor installation	dauerhafte Außenin- stallation / permanent outdoor installation	permanent outdoor installation with cable length up to 50 m

Aktive Antenne RST740

Iridium



Hersteller / Manufacturer	Beam
Frequenz / Frequency	1616 - 1626.5 MHz
VSWR	
Axialverhältnis / Axial Ratio	
Radiation Coverage	

Polarisation	RHCP
Impedanz / Impedance	50 Ohm
Gewinn / Gain	
Anschluß / Connector	TNC female
Kabeltyp	max 13.3 dB loss
Kabellänge	

Gewicht / Weight	
Durchmesser / Diameter	
Höhe / Height	

Größe (LxB)	
Temperaturbereich Operating Temp.	-25°C - +55°C
Schutzklasse Protection Class	

Einsatzgebiet Application area	dauerhafte Außeninstallation mit Kabellängen bis 104 m permanent outdoor installation with cable length up to 105 m
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