



ISO 9001:2008/FAA Approved Facility

# Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna: P/N: 1.5GIR1516RR-AP-20MNSS-4 (3.6" x 1.5" x 0.6"), Front, Back or Magnetic Mount with Cable



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

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**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

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**ELECTRICAL:**

	IRIDIUM	GPS
FREQUENCY:	(1610.0 - 1626.5) MHz	L1: (1575.42 ±13)
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 1.5:1
GAIN (dB):	4 ft G.P. / Free Space	F.S. / 4 ft G.P.
@ 90° (Zenith):	+4.9 / +5.0	+4.6 / +2.9
@ 10° Elevation:	-1.0 / -2.5	-2.5 / -1.8
@ 20° Elevation:	+1.5 / -0.5	-1.1 / +0.7
@ 30° Elevation:	+2.4 / +1.0	+0.5 / +1.7
@ 60° to 90° Elevation:	>+3.3 / >+2.7	> 3.6 / > 2.1
BEAM WIDTH (3dB):	129 ° / 98 °-106 °	103 ° / 146 °
AXIAL RATIO @ Zenith:	2 dB	2 dB
POWER HANDLING:	30 W	1 Watt
LIGHTNING PROTECTION:	DC GROUNDING	DC GROUNDING
FILTER (REJ. @1616 MHz):	> 60 dB	> 60 dB
LNA GAIN:	N/A	(33.0±1.0) dB, 20dB (-A2- Option)
LNA P 1dB Out:	N/A	+16 dBm
LNA NOISE FIGURE:	N/A	2.8 dB (Filter loss is included)
VOLTAGE/CURRENT:	N/A	(+2.8 TO +28) Volts DC / (30 TO 50) mA

**MECHANICAL:**

SIZE: WIDTH: 1.56 in. [39.7 mm], LENGTH: 3.64 in [92.5 mm], HEIGHT: 0.63 in. [16.0 mm]

WEIGHT: 3.5 oz. (99 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL, AND NICKEL PLATING

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT

CONNECTOR: IRIDIUM: SMA MALE (J1, Red); GPS: SMA MALE (J2, Blue)

MOUNTING: FLAT FRONT (2 x 6-32 SCREWS), BACK (4 x 2-56 SCREWS), or FLUSHMAGNET

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]

ALTITUDE: 70,000ft.

VIBRATION: > 30 G's

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

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QUANTITY REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	NEW
4					5
1					3
1					1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCES PER ANSI Y14.5

REMOVE ALL BURRS BREAK EXTERNAL EDGES TO .015 FILETS R .005 TO R .030 SQUARE CORNERS PER MIL-STD-883B DIA'S ON A COMMON SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

Low Profile Ruggedized Active GPS/IRIDIUM Antenna

APPROVED: S. HUYNH June-27-07

REVISION: 3CVE1

SCALE: 1/1

SHEET 1 OF 1

**CONFIGURATION:**

1:	2:	3:	4:
2" SQ. (FLAT)	2.6" DIA. (FLAT)	MINI ARINC (FLAT)	HELIHANDHELD
1.9: 1.9" SQ. (FLAT)	3.5" DIA. (FLAT)	HELIXROD	HELIHANDHELD
2: 2.6" DIA. (FLAT)	MINI ARINC (FLAT)	HELIXROD	HELIHANDHELD
3: 3.5" DIA. (FLAT)	MINI ARINC (FLAT)	HELIXROD	HELIHANDHELD
4: MINI ARINC (FLAT)	HELIXROD	HELIHANDHELD	

**FRONT VIEW**

**BACK VIEW**

**CONNECTOR:** IRIDIUM: SMA MALE (J1, Red); GPS: SMA MALE (J2, Blue)

**POWER:** (+2.5 to +30) Volts DC

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A: WITH LNA	X: NO CABLE	S: SMA-P: PINS	1: GLOSS WHITE #17925 PER FED-STD-595B
P: WITHOUT LNA	MN: Flush Mag. Mount #: Cable Length (in)	M: MCX-MM; MMCX	2: LUSTERLESS GRAY #36320 PER FED-STD-595B
A2: WITH 20dB LNA	R: RIGHT ANGLE CON.	N: N; NB: N-Bulkhead	3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
		T: TNC; TB: TNC-Bulkhead	4: LUSTERLESS BLACK #37038 PER FED-STD-595B

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