



FAA Approved Facility

GPS/RHCP-Inmarsat/Iridium Antenna P/N: S53IR16RR-P-XX-X

(P/N: S53RxIN-P-XX-X for Rx only)

LHCP-Thuraya Antenna P/N: S53IR16LL-P-XX-X (P/N: S53RxT-P-XX-X for Rx only)

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

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



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

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SPECIFICATIONS

ELECTRICAL:

| FREQUENCY (MHz): | (1575.42±15) | (1542.50±17.5) | (1642.50±17.5) | (1602-1616) | (1610-1626) | (1227.60±15) |
|--------------------------|----------------------------|----------------|----------------|--------------|--------------|-------------------|
| GAIN (dBic) 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) | | | | | |

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

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

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C
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A

REVISIONS

| ZONE | REV | DESCRIPTION | DATE | APPROVED |
|------|-----|-------------|------|----------|
| | | | | |

QUANTITY REQD

| QTY | DESCRIPTION | PART NO | FINISH | REF NO |
|-----|-----------------------------------|--------------|--------|--------|
| 4 | MOUNTING SCREW: (10-32, 1") | MS24693C276 | - | 5 |
| 1 | | | | 4 |
| 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 | | | |

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS: TOLERANCES AND ANGLES
± 1/64 DEC. 015 ANGLES ± 1'

TOLERANCES 5th PER ANSI Y14.5

REMOVE ALL FILLS
BREAK EXTERNAL EDGES JOBS TO .015
FILES & .005 TO R.005
SLOTTED HOLES PER MIL-C-2879
DATE ON A COMMON 6 OF JOBS
MACHINED SURFACES 1/2

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

PIPE/FLAT MOUNT, IRIIDIUM/GPS/GLONASS/INMARSAT HELIX ANTENNA

DATE: DEC-03-03

SCALE: 1/1

SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas

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

P/N: S53IR16RR-P-XTB-1

CC: 3CVE1, NAICS: 334511, S.Huynh, April 5, 2016

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

90 of 163