



FAA Approved Facility

S-Band RHCP or LHCP Antenna, P/N: 1.5G25XX-X-XS-X

1.5" Square, Back Mount Configurations



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

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4x R.395 [R10.03]

2x 1.540 [39.12]

1.500 [38.10]

.427 [10.85]

.450 [11.43]

MOUNTING:
4X 2-56 UNF-2A
X 0.155 Deep

4X .593 [15.06]

.101 [2.58]

OPTIONAL MOUNTING:
2-56 SCREWS, ADHESIVE GASKET,
HYSOJ, OR RTV

PASSIVE IRIIDIUM
L-BAND ANTENNA
P/N: 615IR16RR-P-XS-4
S/N: 42961 WT: 1.5 oz.
Antcom Corporation
Torrance, CA, USA
Mfg. 11/20/05

FEMALE SMA CONNECTOR
(PIN, TNC, N , OTHER CONNECTOR,
OR CABLE IS OPTIONAL)

.142 [3.62]

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

CABLES LENGTH : CONNECTOR : COLOR :

| | | |
|----------------------|--------------------------|--|
| X: NO CABLE | S: SMA; P: PINS | -1: GLOSS WHITE #17925 PER FED-STD-595B |
| M: WITH MAG. MOUNT | M: MCK; MM: MMCKX | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B |
| P: CABLE LENGTH (IN) | N: NS; N: N-Bulkhead | -3: OLIVE DRAB GREEN #14031 PER FED-STD-595B |
| R: RIGHT ANGLE CON. | T, TB: TNC, TNC-Bulkhead | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |

P/N: 1.5G25XX-X-XS-X

REVISIONS

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

SPECIFICATIONS

ELECTRICAL:

| | | |
|------------------------|-------------------------------|-------------|
| FREQUENCY: | (2484 - 2499) MHz | |
| RADIATION PATTERN: | HEMISPHERICA L | |
| POLARIZATION: | RHCP OR LHCP (See P/N Below) | |
| VSWR: | < 1.5:1 | |
| GAIN (dB): | 4 ft G.P. | 3.5 in G.P. |
| @ 90° (Zenith): | +4.6 | +5.7 |
| @ 10° Elevation (Ave): | -1.1 | -2.4 |
| @ 20° Elevation (Ave): | +2.2 | -0.1 |
| @ 30° Elevation (Ave): | +2.2 | +1.6 |
| @ 45° Elevation (Ave): | +3.4 | +3.0 |
| @ 70° Elevation (Ave): | +4.4 | +5.0 |
| BEAM WIDTH (3dB): | 129 ° | 98 ° |
| AXIAL RATIO @ Zenith: | 2.0 dB | |
| IMPEDANCE: | 50 Ohms | |
| POWER HANDLING: | 200 Watt | |
| DC GROUNDING: | YES (LIGHTNING PROTECTION) | |

LNA OPTION :

| | | |
|--------------------------|-------|--|
| LNA GAIN : | N/A | (35 +/- 1) dB |
| LNA NOISE FIGURE : | N/A | 2.8 dB |
| LNA VOLTAGE : | N/A | (+2.5 to +30) Volts DC FROM Rx RF CON . |
| LNA DRAWING CURRENT : | N/A | < 38 mA |
| FILTER (REJ. @1616 MHz): | 57 dB | |

MECHANICAL:

SIZE: LENGTH=1.54 in. [39.12 mm], WIDTH=1.54 in. [39.12 mm]
HEIGHT= 0.427 in. [10.85 mm]

WEIGHT: 1.1 oz. (31.2 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5441

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

CONNECTOR : FEMALE SMA CONNECTOR
(TNC, N , OTHER CONNECTOR, OR CABLE IS OPTIONAL)

ENVIRONMENTAL:

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

ALTITUDE: 70,000 ft.

VIBRATION: > 30 G's

LEAKAGE : HERMETICALLY SEAL

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

| SIZE | FREQ. BAND | POLARIZATION | LNA | FILTER |
|---------------|--------------|--------------|---------------------|--------|
| 1: 2" SQ. | 1625: Tx/Rx | LL: LHCP | A1: WITH +23 dB LNA | |
| 1.5: 1.5" SQ. | 25: 2483 MHz | LL: LHCP | A2: WITH +43 dB LNA | |
| 2: 2.8" DIA. | 16: 1616 MHz | RR: RHCP | P: WITHOUT LNA | |
| 3: 3.5" DIA. | | | | |
| 4: MINI ARINC | | | | |

| QUANTITY REQD | DESCRIPTION | PART NO | SPECIFICATION | MATERIAL | FINISH | REF. NO. |
|---------------|-------------|-----------------|----------------|----------|--------|----------|
| -2 | -1 | ADHESIVE GASKET | 123450-3M-1.2G | | | 1 |

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS TO DECIMALS AND ANGLES
± 1/64 DECIMALS ± 1°
TOLERANCE SHIP PER ASH Y14.5
BEVEL ALL EDGES
BREAK SHARP EDGES .045 TO .015
FILLS IN .015 TO .005
DAYS ON A CORNER & 270°
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

1.5" SQ.
S-Band CP Antenna

APPROVED S. HUYNH
Aug-27-03

3CVE1 1.5G25XX-X-XS-X

SCALE 1/1 SHEET 1 OF 1