



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>

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

4x R.395 [R10.03]

2x 1.540 [39.12]

1.500 [38.10]

.427 [10.85]

.450 [11.43]

4x .593 [15.06]

.101 [2.58]

.142 [3.62]

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

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

PASSIVE IRIIDIUM  
L-BAND ANTENNA  
P/N: S15IR16RR-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)

2. MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

SIZE	FREQ. BAND	POLARIZATION	LNA	FILTER
1: 2" SQ.	1625- 2xRx	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				

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: MMCK	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TB; TNC; TNC-Bulkhead	-3: OLIVE DRAB GREEN #34011 PER FED-STD-595B
		-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

**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 IRIIDIUM 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

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

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
FRACTIONS TO DECIMALS AND  
DECIMALS TO THOUSTHS UNLESS  
OTHERWISE SPECIFIED  
TOLERANCE ARE PER ASH Y14.5  
SEW ALL SURFACES UNLESS  
OTHERWISE SPECIFIED  
DIMENSIONS ARE TO CENTER  
UNLESS OTHERWISE SPECIFIED  
MACHINED SURFACES  
DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

1.5" SQ.  
S-Band CP Antenna

DESIGNED: S. HUYNH  
APPROVED: S. HUYNH  
DATE: Aug-27-03

REV: 001  
REV: 002  
REV: 003  
REV: 004  
REV: 005  
REV: 006  
REV: 007  
REV: 008  
REV: 009  
REV: 010

SCALE 1/1

SHEET 1 OF 1