



ISO 9001:2008/FAA Approved Facility

IRIDIUM Antenna, P/N: S1.5IR16RR-P-XS-X Rev B

S1.5IR16RR-P-XS-4-TuneP (for Potting Effect)

1.5" Square, Back Mount Configurations

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



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REVISIONS		DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	(1610.0 - 1626.5) MHz	SEE PART NO. BELOW
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
GAIN (dB):	4 ft. G.P. 2.6 in G.P.	
@ 90° (Zenith):	+4.9 +4.4	
@ 10° Elevation (Ave):	-1.0 -2.6	
@ 20° Elevation (Ave):	+1.5 -1.0	
@ 30° Elevation (Ave):	+2.4 +0.4	
@ 45° Elevation (Ave):	+3.3 +2.5	
@ 70° Elevation (Ave):	+4.7 +4.0	
BEAM WIDTH(3dB):	129° +106°	
AXIAL RATIO @ Zenith:	2.0 dB	
IMPEDANCE:	50 Ohms	
POWER HANDLING:	200 Watt	
DC GROUNDING:	YES (LIGHTNING PROTECTION)	

MECHANICAL:

SIZE: 1.5in Square
HEIGHT= 0.447 in. [11.35 mm]

WEIGHT: 1.5 oz. (42.5 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: 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

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

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

SIZE	FREQ. BAND	POLARIZATION:	LNA:	FILTER
1: 2" SQ.	1625: Tx/Rx	LL: TX: LHCP, RX: LHCP	A1: WITH +23dB LNA	
1.5: 1.5" SQ.	25: 2493MHz	LR: TX: LHCP, RX: RHCP	A2: WITH +43dB LNA	
2: 2.0" DIA.	16: 1616MHz	RR: TX: RHCP, RX: LHCP	P: WITHOUT LNA	
3: 3.0" DIA.		RR: TX: RHCP, RX: RHCP		
4: MINI ARINC				

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CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
R: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

QUANTITY	DESCRIPTION	PART NO.	SPECIFICATION	MATERIAL	FINISH	ITEM NO.
-	ADHESIVE GASKET	123456G-3M-1.2G				5
-						3
-2						1

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
FRACTIONS: TOLERANCES ARE: ANGLES: ± 1/64 .005 .005 ± 1°
TOLERANCE .5MM PER ANSI Y14.5
BREAK: EXTERNAL EDGES .005 TO .015
FILLET: R.005 TO R.015
SOBOW: .005 PER MIL-C-8879
DIMS ON A COMMON S. 2°/100°
MACHINED SURFACES 12.5
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

1.5" SQ.
IRIDIUM ANTENNA

DRAWN: _____
CHECKED: _____
ENGINEER: _____
APPROVED: S. HUYNH Aug-27-03
DATE FILED: _____

REV	DESCRIPTION	DATE
D	3CVE1	S1.5IR16RR-P-XS-X

SCALE 1/1 SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas