



ISO 9001:2008/FAA Approved Facility

# Iridium Helix Antenna

## P/N: S5BIR16RR-P-XT-1-002

### 4.6" Tall Blade Configuration



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#### SPECIFICATIONS

**ELECTRICAL:**

FREQUENCY (MHz):	(1609-1626)
GAIN (dBic) in FS	IRIDIUM
@ 90° (Zenith):	+2.2 / +0.6
@ 15° Elevation:	+0.4 / -0.7
@ 25° Elevation:	+1.3 / +0.2
@ 45° Elevation:	+0.5 / -0.6
@ 50° Elevation:	+0.7 / -0.2
@ 60° Elevation:	+1.3 / +0.2
@ 70° Elevation:	+2.2 / +1.4
BEAM WIDTH (3dB)	160 / 160 Deg.
AXIAL RATIO (dB)	1 to 3
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
DC GROUNDING:	YES (LIGHTNING PROTECTION)

**MECHANICAL:**

SIZE: LENGTH = 5.25 in. [133.35 mm], WIDTH = 1.75 in. [44.45 mm]  
 HEIGHT = 4.625 in. [117.48 mm]

WEIGHT: 5.15 oz. (146 g)

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

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

CONNECTOR: TNC FEMALE  
 (SMA, TNC, N , BULKHEAD or CABLE)

**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

1	2	3	4	5	6	7
1	0-RING	M528775-024	-	-	-	2
4	MOUNTING SCREWS (10-32, 3/4")	M524693C274	-	-	-	1

  

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	UNIT
1	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO THIRDS OF AN INCH ± 1/64 DECIMALS ± .010 ± .005 ± .002	ANTCOM CORP. TORRANCE, CALIFORNIA			
1	TOLERANCE S1M PER ANSI Y14.5 REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .015 FILETS R .005 TO R .030 SCREW THREADS PER MIL-C-26778 DATE OF A COMMON 2 OF 2005 MACHINED SURFACES 125/	IRIDIUM AIRBORNE IRIDIUM HELIX ANTENNA			
1	DO NOT SCALE DRAWING	ANTCOM CORP. TORRANCE, CALIFORNIA			