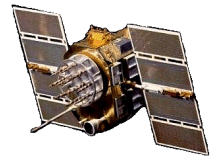




ISO 9001:2008/FAA Approved Facility

# IRIDIUM Antenna, P/N: 11R16RR-P-XB-X Rev D

1.36" Diameter x 9.8" Tall, C130/Sextant Port with 2 Lock-Pin Configuration  
with BNC, TNC, SMA or N Connector Options



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Technical drawing showing side and top views of the antenna. Dimensions include: diameter 1.36 [34.54], height 9.824 [249.54], and various mounting hole positions. A top view shows a 180-degree angle between two lock pins.

REVISIONS		DATE	APPROVED
B	ADD ON BNC Connector Option	OCT-20-08	S.H
C	1 LOCKING PIN	NOV-24-08	S.H
D	2 LOCKING PIN	JAN-20-09	S.H

### SPECIFICATIONS

FREQUENCY (MHz):	(1575.42 ±15)	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1616)	(1610-1626)	(1227.60 ±15)
GAIN (dBic) in FS/4R 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:** DIAMETERS = 1.36in [35mm], 2.6in [64mm]  
**HEIGHT:** = 9.824 in. [249 mm]

**WEIGHT:** 9.8 oz. (277 g)

**FINISH:** SKYDROLRESISTANTPOLYURETHANEENAMEL  
BASE IRIDITE PER MIL-C-5441

**COLOR:** GLOSS WHITE #17925PER FED-STD-595B  
LUSTERLESSGRAY#36320PER FED-STD-595B  
OLIVE DRAB GREEN#34031PER FED-STD-595B  
LUSTERLESSBLACK#37038PER FED-STD-595B

**MATERIAL:** 6061-T6ALUMINUMALLOY BASE  
COMPOSITE RADOME,IMPACT,ABRASION,UV, SOLVENT,  
AND SKYDROLRESISTANCE,FIRE RETARDANT

**CONNECTOR:** BNC CONNECTOR,  
(OPTION:TNC, SMA, N, N Bulkhead,MCX, MMCX)

**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:** 70,000ft.

**VIBRATION:** > 30 G's

**WIND SPPED:** > 135 Miles/hr

**LEAKAGE:** HERMETICALLYSEALED

### FEDERAL & MILITARY SPECIFICATIONS

**DESIGN TO:** FAA TSO-C144, DO-160D, DO-228, MIL-C-5541,  
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

QUANTITY	DESCRIPTION	PARTS LIST	PART NO	FINISH	REF
4				-	5
1				-	4
1				-	3
1				-	2
1				-	1
-1					

CONFIGURATION:	POLARIZATION:	LNA:	CABLE LENGTH	CONNECTOR	COLOR
1: 2" SQ. (FLAT)	LL: TX: LHCP, RX: RHCP	A1: WITH +34 dB LNA	X: NO CABLE	S: SMA, P: PINS	-1: GLOSS WHITE #17925PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	LR: TX: LHCP, RX: RHCP	A: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX, MM: MMCX	-2: LUSTERLESS GRAY #36320PER FED-STD-595B
2: 2.6" DIA. (FLAT)	RL: TX: RHCP, RX: LHCP	P: WITHOUT LNA	#: CABLE LENGTH (IN)	N: N, NB: N Bulkhead	-3: OLIVE DRAB GREEN #34031PER FED-STD-595B
3: 3.5" DIA. (FLAT)	RR: TX: RHCP, RX: RHCP		R: RIGHT ANGLE CON.	T: TNC; TB: TNC- Bulkhead	-4: LUSTERLESS BLACK #37038PER FED-STD-595B
4: MINI ARINC (FLAT)				B: BNC Female	
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					
91: (HELIX Sextant Port)					

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
FRACTIONS DECIMALS ANGLES  
± 1/64 .0005 ± .1°

TOLERANCE 5TH PER ANSI Y14.5  
DIMENSIONS ARE IN INCHES  
FRACTIONS DECIMALS ANGLES  
± 1/64 .0005 ± .1°

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

Sextant Port  
IRIDIUM/GPS/GLONASS/  
INMARSAT HELIX ANTENNA

REVISED: MAY 2009 TO SAE J1455  
CHECK NUMBER FOR REV. 1-2009  
SAE ON A CATALOG # 27-006  
MACHINED SURFACES 1/2"

APPROVED: S. HUYNH  
MAY-20-08

SCALE 1/1

SHEET 1 OF 1

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

P/N: 11R16RR-P-XB-4

NMO Connector Option is Now Available for Some Antennas