

DATASHEET



UC-1374-531

+4 dBic VHF APT Weather Satellite Antenna (WXSAT)

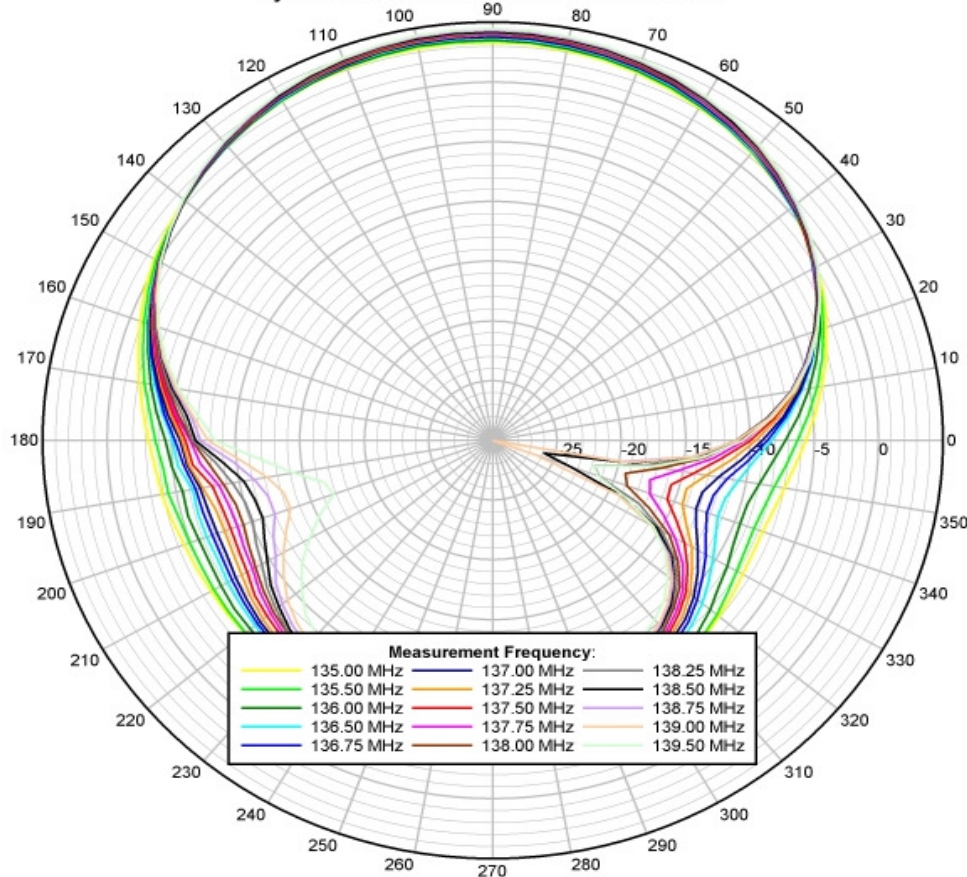
The **Weather Satellite Antenna**, model UC-1374-531 is a +4 dBic Quadrifilar Helix (16 cm/6" OD x 62 cm/24.5" H) designed to operate in the APT Weather Satellite Band of 137 MHz to 138 MHz (137-138 MHz). It may be used to receive NOAA (US) and METEOR (Russian Federation), Weather Satellite data feeds, using narrowband FM receivers, such as those used by Radio Amateurs and VHF Enthusiasts. Weather maps can be received directly from a number of polar orbiting satellites with such receivers. Alternatively, dedicated, low cost Weather Satellite receivers are available to build your own Weather Satellite receive station (WX Satellite). A beginners guide to Automatic Picture Transmission Weather Satellite Reception can be found at [APT Weather Satellite Reception \(you may have to delete the "s" from the URL's https://... for the site to work\)](#). For details on the Weather Satellites, visit the NOAA/NESDIS pages for [Polar Operational Environmental Satellite \(POES\)](#), or the [Meteor Satellites](#)

Elevation Pattern - Antenna UC-1374-531R (free space)

Radial scale in dBic -- Polarization: Right-Handed Circular (RHCP) -- Zenith @ 90°

Outermost ring Gain Level is +5.0 dBic

by: antennas.us -- date: 2011/10/15/11:28 hrs



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UC-1374-531 Technical Specifications

- Frequency range: 137-138 MHz (VHF WXSAT Band)
- Coverage: Omni-directional, Hemispherical
- Polarization: Circular (Axial Ratio 1 dB)
- Peak Gain: +4 dBic (free space) [up to +6 dBic if properly mounted over a ground plane/ground]
Elevation pattern ([free space - NO Ground Plane](#))
- Nominal Impedance: 50 ohm (RF) / Short Circuit (DC)
- Input Power: Receive only service (<5 Watt CW)
- VSWR: 2.0 **VSWR chart**
- Connector: Type N, Female on side
- Dimensions:
 - Housing 16 cm (6") OD x 62 cm (24.5") h
 - Bottom flange 19 cm (7.5") OD x 12 mm (0.5") h
- Mounting: 8 screws, M6 (#1/4-20)
- Operating Temperatures: -40C to +85C
- Weight: 3.1 kg (6.8 lbs)

NOTE:

- Does not require a ground plane

Weather Satellite Kit (WXSAT-APT-KIT)

To make the reception of satellite weather images more accessible, and in response to requests received, we offer a kit with all the components needed to receive Weather Satellite images on Windows desktop computers (Apple users: we are looking into including MacBooks too). The kit includes: UC-1374-531R antenna, [LNAU-0137-648 low noise amplifier with built-in filter](#), 50 ft Coaxial Cable with connectors, USB Receiver dongle, software download and instructions. To go to the Kit's page on our website, search [WXSAT-APT-KIT](#)

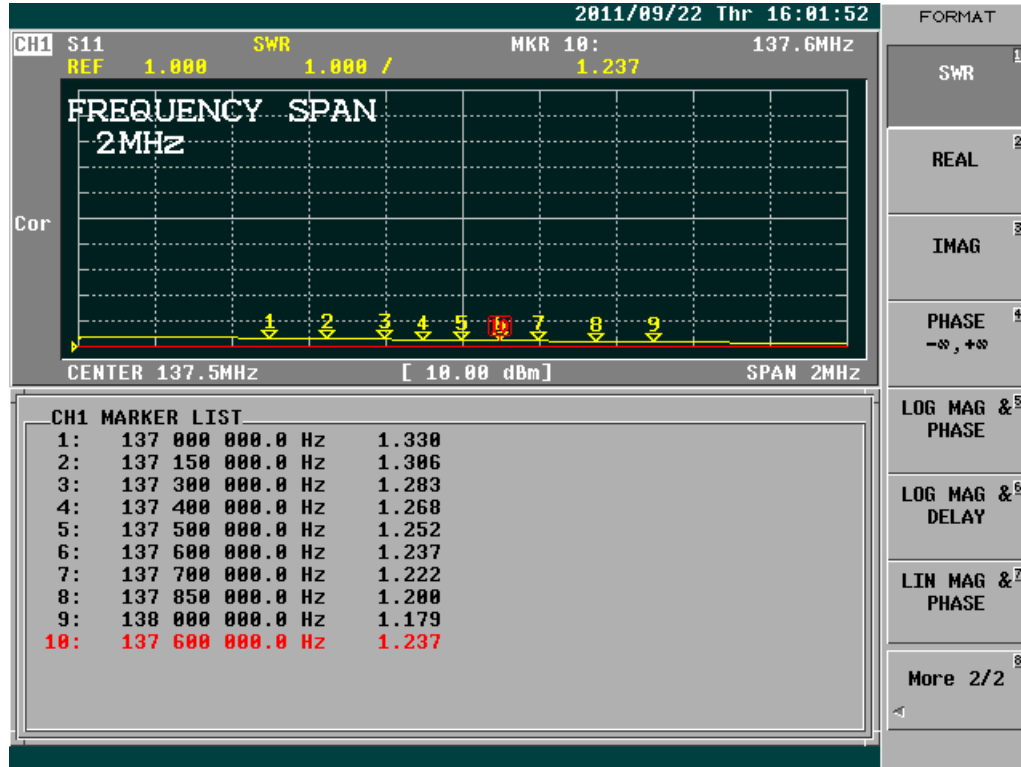
Please visit our website at antennas.us for additional information and links to download and view for Weather Satellite images.

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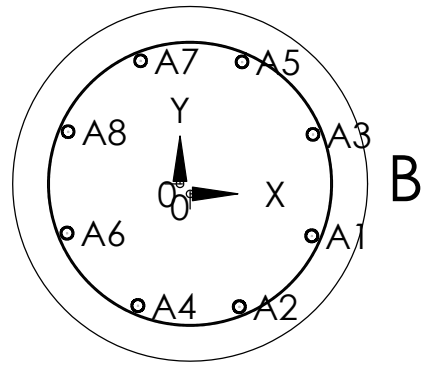
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VSWR Plot UC-1374-531

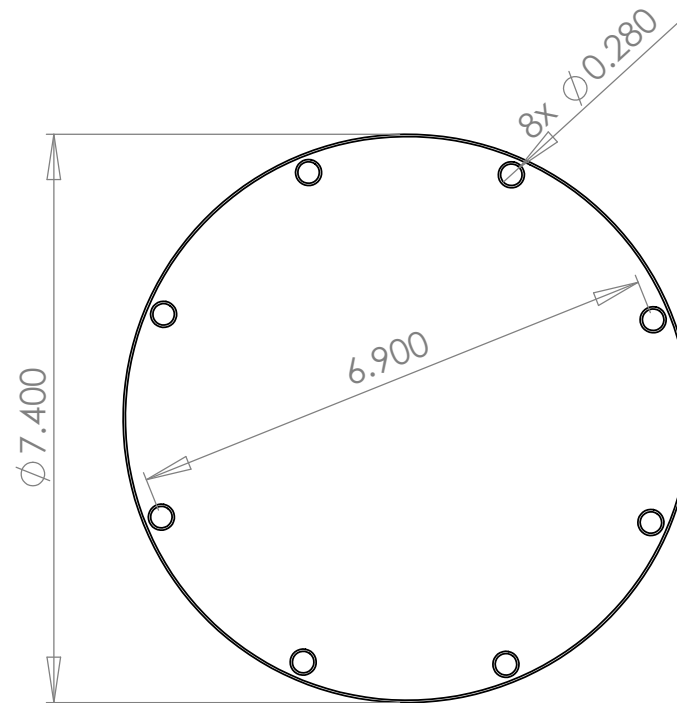
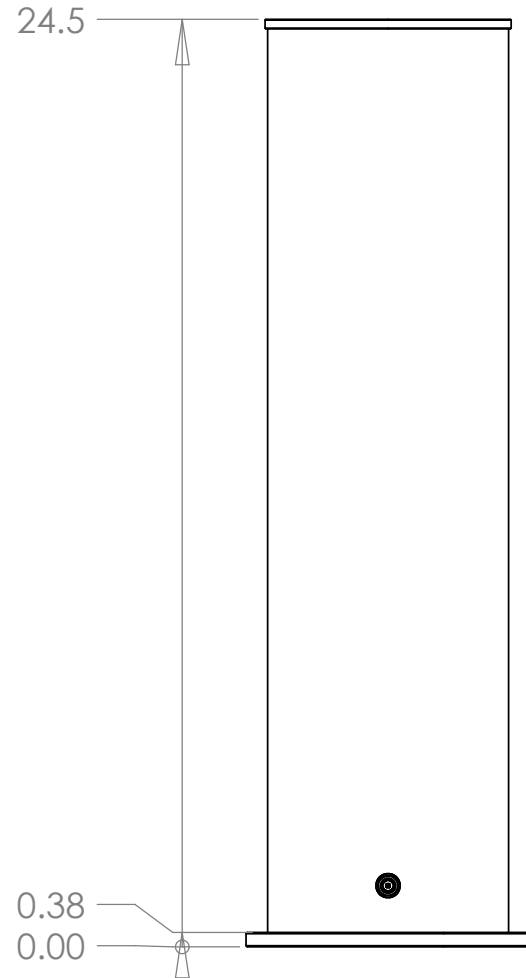


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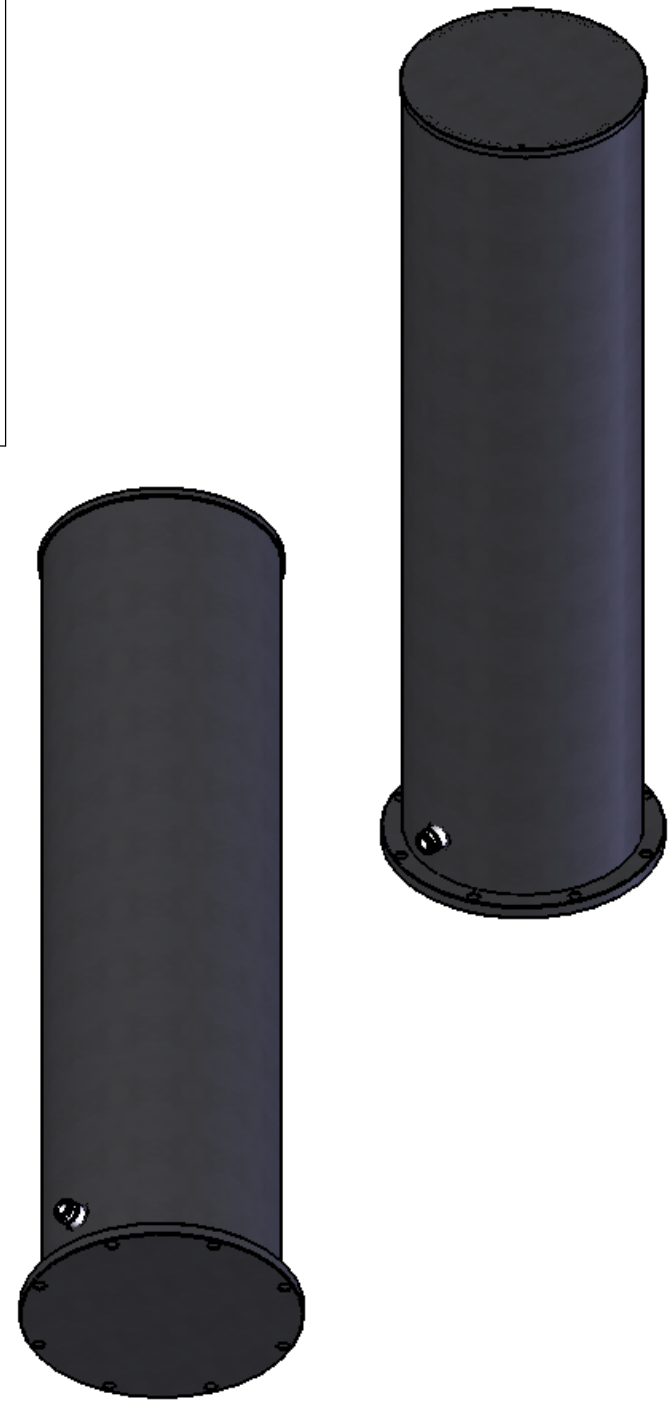
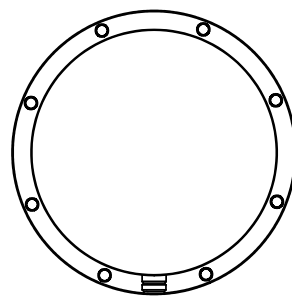


TAG	X LOC	Y LOC	Size
A1	3.173	-1.355	Ø 0.280
A2	1.285	-3.202	
A3	3.202	1.285	
A4	-1.355	-3.173	
A5	1.355	3.173	
A6	-3.202	-1.285	
A7	-1.285	3.202	
A8	-3.173	1.355	



Mounting Flange (Bottom View)

DETAIL B
SCALE 2 : 5



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		DIMENSIONS ARE IN INCHES		DRAWN		SLM		20120329		TITLE:	
		TOLERANCES: ±0.10		CHECKED		SLM		20120405		UC-1374-531 / UC-1464-531	
		FRACTIONAL ±1/64		ENG APPR.		SLM		20120405		SIZE	
		ANGULAR: MACH ±		MFG APPR.						DWG. NO.	
		BEND ±		Q.A.						UC-1374-531	
		TWO PLACE DECIMAL ±0.030		COMMENTS:						REV	
		THREE PLACE DECIMAL ±0.005		INTERPRET GEOMETRIC TOLERANCING PER:						NR	
		MATERIAL		NEXT ASSY		USED ON				SCALE: 1:2	
		PVC		APPLICATION		DO NOT SCALE DRAWING				WEIGHT:	
		FINISH								SHEET 1 OF 1	
		Painted Black									