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Installation Instructions

V2TH (P/N 70018), V4TH (P/N 70208) Satellite Antenna & V-DEM Elevation Mount (P/N 70020)



V2TH with Mount



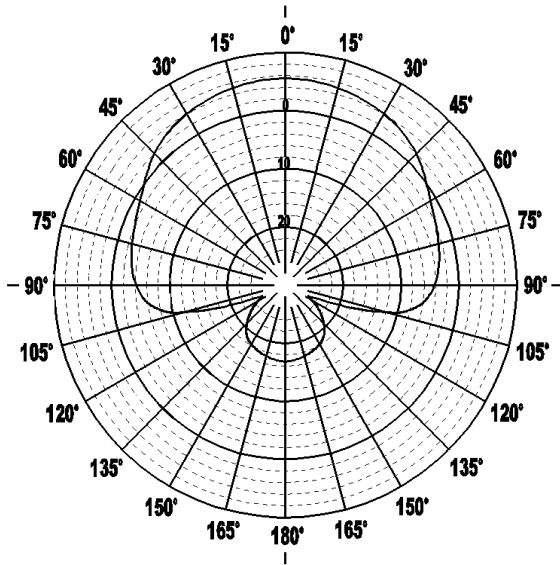
V4TH with Mount

Description

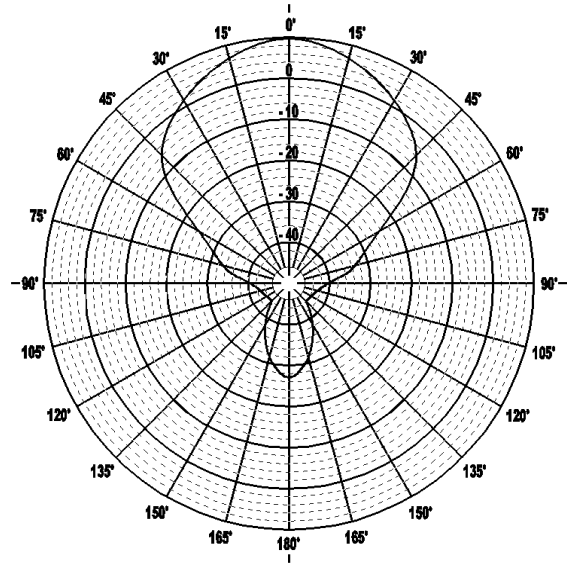
The V2TH/V4TH Satellite Antennas provide users with a high performance geo-stationary satellite data telemetry link for hydrological and meteorological data collection at remote sites. Their sturdy design is able to withstand extreme environmental conditions.

Technical Specifications:

V2TH Antenna

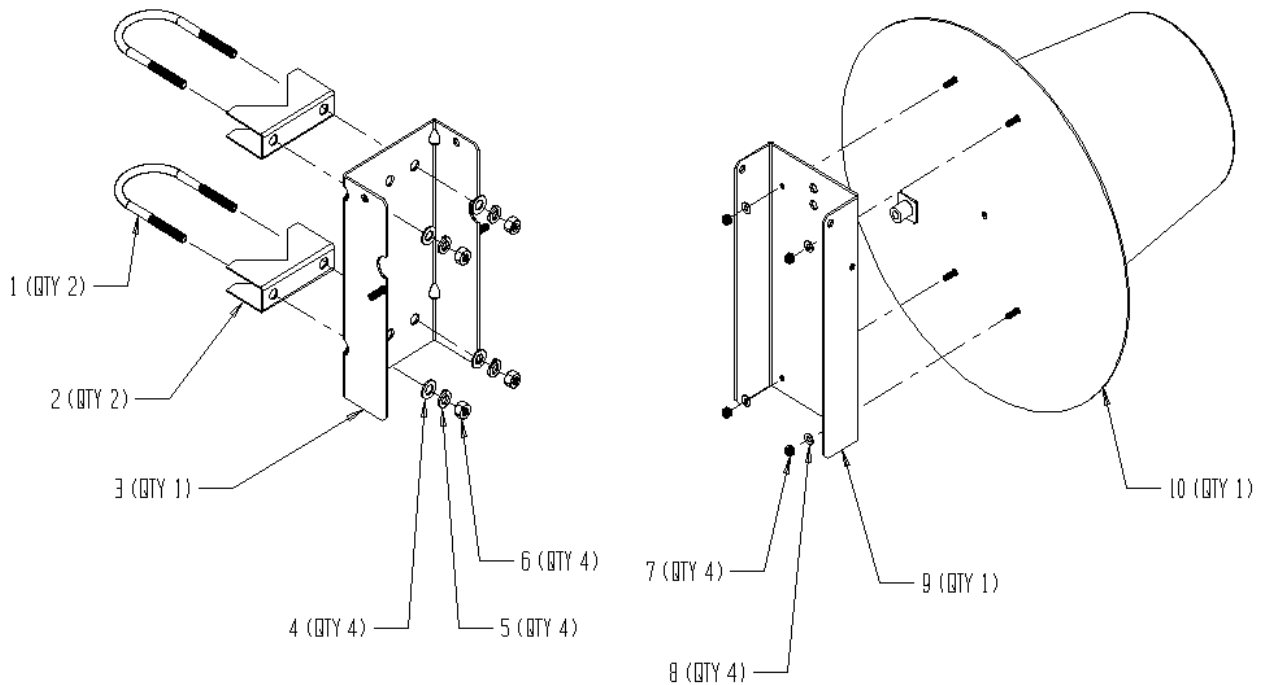


V4TH Antenna



Antenna Beam Pattern

	V2TH	V4TH		V2TH	V4TH
Frequency			Beam Width		
Range	402 MHz± 10 MHz	402 MHz± 10 MHz	1 dB	60°	15°
Impedance	50 Ohms	50 Ohms	3 dB	90°	30°
VSWR	1.5:1 max.	1.5:1 max.	6 dB	120°	45°
Polarization	Right Hand Circular	Right Hand Circular	Axial Ratio	1dB maximum	2dB maximum
Gain	+5.5dB Nominal	+10 dB Nominal	Connection	N Female	N Female
Power	100W CW	100W CW	Size		
Input power range	6 to 25 watts	6.3 to 10 watts	Antenna weight	5 lbs (2.3 kg)	7.8 lbs (3.6 kg)
			Base mount weight	3.6 lbs (1.6 kg)	3.6 lbs (1.6 kg)
Permitted EIRP with input power	44 to 50 dBm	48 to 50 dBm	Base diameter x height x top diameter	16" x 10" x 7.5" (41 cm x 26 cm x 19 cm)	16" x 24" x 7.5" (41 cm x 26 cm x 19 cm)



1. U-BOLT
2. Pipe Clamp Bracket
3. Wall Bracket
4. 5/16 Flat Washer
5. 5/16 Split Lock Washer

6. 5/16-18 Hex Nut
7. #10 Nylock Hex Nut
8. #10 Flat Washer
9. Elevation Bracket
10. Antenna Base Plate

Installation Instructions

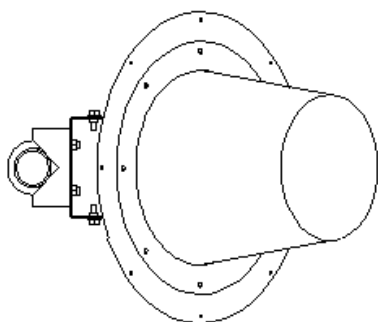
- Holes are provided for wall or strap mount.
- For pipe mount, assemble wall bracket to pipe using supplied U-Bolts and hardware according to drawing above.
- Tighten U-Bolt nuts once azimuth is adjusted.
- Adjust elevation bracket to 90° and mount antenna base plate using supplied #10 hardware.
- Re-adjust elevation bracket to desired elevation.
- Once elevation is adjusted, tighten 2 nuts and 2 hex bolts on prop arms.

Bolts on hinge points do not need to be tightened, but may be tightened for added strength.

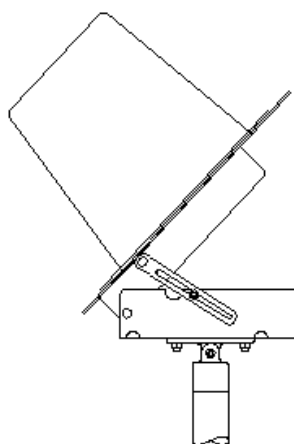
Mounting

The V2TH/V4TH Satellite Antenna can be suspended or mounted inside nonmetallic protective structures, or mounted outside on a building, post or tower. When mounted inside a building, metallic material must not be between the satellite and the antenna. Nonmetallic materials such as painted plywood, window glass, plastic, tar paper, or fiberglass shingles have little or not effect on a radiated signal. For exterior mounting, the V2TH/V4TH Elevation Mount is available. The mounting bracket is designed to clamp to a vertical pole 1 to 2 inches in diameter. It also has holes to allow for clamping to larger pipes or posts using steel hose clamps, or mounting directly to a wall with screws or bolts. Alternate top-of-pole mount assembly (P/N 70100) is available for 2-1/2" pipe.

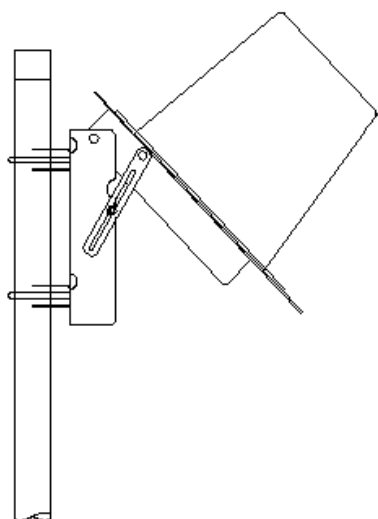
**Side/Top view of
Satellite Antenna on pole.**



**Side view of Satellite Antenna
on top-of-pole.**



**Satellite Antenna with
the Elevation Mount.**



**Front view of the
Satellite Antenna.**

