

The UV6 by Alpha Antenna is a high-performance quad-band vertical antenna engineered for reliable operation across 6 meters, 2 meters, 220 MHz, and 70 cm bands. Designed for both amateur radio operators and emergency communications, it delivers wide frequency coverage with strong, consistent performance.

Built with a rugged fiberglass and metal construction, the UV6 features a weatherproof enclosure and reinforced overlapping shells for long-term durability in demanding outdoor conditions. Its precision linear phase-shift design ensures efficient frequency coupling across all supported bands, while the watertight joint system creates a solid, unified structure that stands up to harsh environments.

With a lightweight yet sturdy design, this antenna mounts easily using a U-bolt mast clamp and supports a wide range of installation setups. Stainless steel hardware and a high wind survival rating make it ideal for permanent or portable deployments.

Performance is enhanced by an optimized radial system and impressive gain across multiple bands, helping you maximize signal strength whether operating locally or over extended distances.

Key Features:

- Quad-band operation: 6m / 2m / 220 MHz / 440 MHz
- Durable fiberglass construction with weather-resistant housing
- Watertight coupling system for added strength and longevity
- Wideband performance with strong multi-band gain
- Omnidirectional coverage for consistent signal transmission
- Easy mast mounting with included clamp hardware
- High wind resistance for outdoor reliability

Specifications:

- Height: 8 ft 4 in
- Power handling: up to 150 watts
- Connector: SO-239 (UHF female)
- Mounting range: 1.25" to 2.25" mast diameter
- Weight: approx. 2.5 lbs
- Wind survival: up to 110 mph

Gain

- 6 meters (50–54 MHz): 2.1 dBi,
- 2 meters (144–148 MHz): 6.2 dBi,
- 1.25 meters (220–225 MHz): 7.3 dBi,
- 70 cm (440–450 MHz): 8.4 dBi.

A little about SWR

Many people obsess about their SWR, just as we do at Alpha Antenna. One person stated correctly:

“I try and keep it below 2.5:1 personally. When I’m setting up a new antenna I do tend to obsess over trying to bring it down to 1.5 or lower. Just can’t help it. W6EL, Extra class” Reference: [What do you consider acceptable SWR? : r/amateurradio](#)

Mathematically, dB loss (not power loss) is minuscule at 2.2:1. Reference: [The Impact of SWR and dB Loss](#)

- Where, the difference between an SWR of 2.2 and 2.0 would be a loss of 0.75% for your signal’s dB power, which translates to a loss of .02085% of a unit on an S-Meter; similarly, going from an SWR of 2.2 to 1.0:1 would be an imperceivable 3% of an S-Unit.

However, our discussions with the engineers at most major rig manufacturers have taught our team at Alpha that it is common practice for rigs to not fold power back till SWR reaches 2.5:1. So, an SWR of 2.5:1 is ok according to the rig manufacturer engineers.

BUT WAIT! What can be done to help the antenna achieve a lower SWR once everything has been done to ‘tune the antenna’?

Recommendations and Troubleshooting SWR for the UV6 antenna

Antenna SWR may be influenced by height above ground, nearby obstacles, and grounding/coax type. For best SWR we recommend that you:

1. Place the antenna as high as possible (18-feet or higher is best).
2. Ensure your equipment has a short ground wire to a ground stake.
3. Use only low-loss coax with high-quality PL-259 connectors.

Here are the most common reasons for SWR readings being higher than 2.5:1.

- If you are using a triplexer: A faulty, low-quality, or dirty triplexer can cause

dramatic SWR spikes.

- Issues with Coax: Lossy or damaged feedlines, or a poorly connected PL-259 connector, will skew SWR readings.
- Nearby Obstructions: Being mounted too close to metal masts, gutters, or roofs detunes the antenna. It should be as high and clear of obstructions as possible (18-feet or higher is recommended).
- Chokes/Ferrites: Feedline radiation can occasionally interfere with readings. Placing a ferrite clamp at the coaxial feed point can help decouple the feedline from the antenna. Please also make sure that your coax is not coiled up near your antenna analyzer when taking measurements.

Also, when taking readings with the Antenna Analyzer, please set it on a non-conductive table or the ground. In other words, make sure that you are not holding it as your body may impact the SWR readings. If you still have an issue, please send us a couple of images to include the analyzer reading and the antenna installation.

If you still have an SWR above 2.5:1, please feel free to email us a wide-angle picture of your installations for further evaluation.

We listen!

We are dedicated to improving all of our [Base VHF UHF HF Antennas](#). So, specifications and descriptions are subject to change without notice.

5.0



Based on 19 reviews

5★

100

100%

4★

0%

3★

0%

2★

0%

1★

VHF UHF 6M Quad-band Antenna

0%



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SF

1.

Protected_User_1d57be87

Verified owner

Featured Review

October 4, 2026



ALPHA® VHF UHF 6M Quad-band Antenna

Verified review - [view original](#)

Have received product in good shape, fast shipping have checked set average across all bands 1.5 to 1, have yet to put it up on mast. But expect it to work very well great antenna.

update: have antenna installed on 50' mast and am hitting repeaters at 80+ miles from my location.

FANTASTIC ANTENNA !!!!!!!! thank you.

Sam

AS

2.

Protected_User_87733975

VHF UHF 6M Quad-band Antenna

Verified owner

Featured Review

September 6, 2026



α ALPHA [VHF UHF 6M Quad-band Antenna](#)

Verified review - [view original](#)

This is a great antenna. Very pleased with its performance. Ordering was easy, and shipping was quick. This is one of two antennas I have purchased from Alpha. Highly recommend their product, and Alpha as a company.

S

3.

Protected_User_76fbb09d

Verified owner

Featured Review

July 19, 2026



α ALPHA [VHF UHF 6M Quad-band Antenna](#)

Verified review - [view original](#)

Purchased July 2026, excellent materials and construction...low SWR on

VHF UHF 6M Quad-band Antenna

50.1250 to 52.00Mhz - and can adjust to 52.00-54.00Mhz if you wish. Low SWR across 144-148Mhz, 222-225Mhz and 438-446Mhz. Great economic alternative to foreign-made.

RG

4.

Protected_User_5d9e3d6d

Verified owner

July 12, 2026



ALPHA VHF UHF 6M Quad-band Antenna

Verified review - [view original](#)

ST

5.

Protected_User_4cc50576

Verified owner

June 23, 2026



ALPHA VHF UHF 6M Quad-band Antenna

Verified review - [view original](#)

VHF UHF 6M Quad-band Antenna

Post office lost my antenna for 2 weeks. Alpha Antenna shipped it the first day. They were quick to work with me and follow up throughout the 2 weeks. They were going to fedex a replacement when this one arrived. Antenna performance is great!!! SWR is beautiful on all 4 bands and getting into the repeaters better with this one then the Jetstream 5/8 dual band antenna. Highly recommend this antenna.

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