Product Overview

Base/repeater vertical covering 6M, 2M, 220 MHz, and 440 MHz with an omnidirectional pattern.

Key Specifications

Specification	Details
Bands	6M / 2M / 220 MHz / 440 MHz
Height	8 ft 4 in
Power	up to 150W
Connector	SO-239
Mast range	1.25 to 2.25 in
Antenna weight	approx. 5 lb
Wind survival	up to 110 mph
Gain	2.1 / 6.2 / 7.3 / 8.4 dBi by listed band

Best For

- Permanent or portable base/repeater installations
- Amateur radio and emergency communications
- Operators wanting one vertical for four bands

What’s Included

- Quad-band vertical antenna with mast-clamp hardware

Setup and Operation

Mount high and clear of nearby metal/obstructions. The page recommends 18 ft or higher for best SWR and low-loss coax with quality PL-259 connectors.

Performance and Technical Information

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 ft 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.
- It should be as high and clear of obstructions as possible (18 ft 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.

Support Resources

- User Manuals: Alpha Antenna User Manuals hub.
- Videos: Related videos.
- Guidance / FAQs: Available HERE.
- Customer Reviews: Scroll to bottom of this page.

We Listen

We are dedicated to improving all of our systems. Specifications and descriptions are subject to change without notice.

5.0
★ ★ ★ ★ ★
★ ★ ★ ★ ★
Based on 21 reviews
5★
100
100%
4★

0%
3★
0%
2★
0%
1★
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1. SF

   Protected_User_52c2e0e6
   Verified owner
   Featured Review
   October 4, 2026
   ★★★★★
   ★★★★★
   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

2. AS

Protected_User_811cbdd4
Verified owner
Featured Review
September 6, 2026
★★★★★
★★★★★
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.

3. S

Protected_User_b15179f2
Verified owner
Featured Review
July 19, 2026
★★★★★
★★★★★
VHF UHF 6M Quad-band Antenna

Verified review - view original

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

4. M

Protected_User_9899f875
Verified owner
November 17, 2026
★★★★★
★★★★★
VHF UHF 6M Quad-band Antenna

Verified review - view original

Alpha Antenna UV6 is a very good choice to eliminate having so many different antennas on your tower.
SWR is flat on all bands even seems to work on GRMS frequencies fine.
6 meters is a bit narrow as to be expected. Well built and easy to assemble.
Only complaint is the USPS took over 2 weeks to deliver it, but that’s not Alpha’s fault, they got it to the USPS in one day.
I would highly recommend getting this antenna if you need a 4 band for a great price.

5. J

Protected_User_393b748f
Verified owner
November 9, 2026
★★★★★
★★★★★
VHF UHF 6M Quad-band Antenna

Verified review - view original

VHF UHF 6M Quad-band Antenna

Easy to set up and nice performane

Show more reviews (16)