The Alpha EmComm MagLoop is a 100-watt antenna for VHF, UHF, and HF 15-40 meters, featuring a low-loss BNC connector and feed line, with built-in and detachable tripod legs. This makes it an excellent choice for use at home or as a portable antenna on balconies, desktops, parks (POTA), summits (SOTA), or similar outdoor settings.

Use our Make an Offer Program and Click this button if you can't afford full price.

Make An Offer (Without Options)

Videos

Specifications

- Tunable from 7MHz to 21.450MHz plus 2 Meters and 440MHz.
- Rated at 100W PEP SSB, 50W CW, or 25W Digital & FM.
- IP Rating is IP-53: Protected against dust limited ingress, no harmful deposits. Protected against direct sprays of water up to 60 degrees from the vertical.
- Environmental operating parameters: -15 to 150 degrees Fahrenheit and winds up to 25 Mph before needing additional weight.
- Weight: 24 Ounces or 0.68Kg.

Included

1 – Two-piece mast that couple together,
3 – Tripod legs that install onto the tuning box,
1 – Tuning box with 3 built-in Female tripod leg inserts,
1 – Built-in Female 5/8 11 threads for mounting on Alpha Antenna's tripods (Optional 1/4-20 adapter is available for photography tripods),
1 – BNC Female to UHF PL259 Male adapter,
1 – Outer LMR400 loop,
1 – Inner shielded faraday loop with 9′ feed line and BNC connector, and
1 – Field Bag.

Materials Used

The following materials are used in the construction of the EmComm Loop antenna:

- Gold,
- Solder,
- Ceramic,
- Aluminum,
- Stainless steel,
- Marine shrink tubing,
- Times Microwave LMR400, and
- Carbon Fiber infused polymers.

Deployment Bandwidths

The bandwidths of the VHF UHF HF EmComm Loop before returning is necessary are:
40M – 28KHz
30M – Once tuned, it covers the entire band.
20M – 60KHz
17M – Once tuned, it covers the entire band.
15M – 180KHz
VHF – Does not need to be retuned.

UHF – Does not need to be retuned.

Testing

Each loop is tested using two-step process
Step 1: A calibrated analyzer is used to confirm resonance on 146MHz, 435MHz, 7.0MHz, 14.175MHz, 18.125MHz and 21.450MHz.

Step 2. A HF transceiver with inline watt meter is used to transmit and confirm power handling at 25W Digital & FM, 50W CW, and 100W SSB.

Loop Differences

Alpha Antenna has two different Magnetic Loop antennas. Click Here to learn the differences and similarities between this EmComm Loop and the Model 100W MagLoop.

Evolution of Efficiency

In 2014 Alpha Antenna offered a built-in LED tuning aid that would light up at approximately 5 Watts when the loop was tuned. We removed the LED, which activated at about 5 W, because it diverted power from transmission. Without the LED, more energy is radiated, improving antenna efficiency.

Assistance

FAQs: Alpha Loop MagLoop antenna

We listen!

We are dedicated to improving all of our Portable VHF UHF HF Antennas. Specifications and descriptions are subject to change without notice.

5.0
★ ★ ★ ★ ★
★ ★ ★ ★ ★
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99
99%
4★
1
1%
3★
0%
2★
0%
1★
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1. RY

Protected_User_a083e243
Reviewer
Featured Review
September 23, 2026

★★★★★
★★★★★

100 Watt VHF UHF HF EmComm MagLoop

Verified review - view original

Thank you to Alpha Antenna for making the antenna buying experience top-notch! Steve was incredibly responsive whenever I had questions during the purchase process, as well as after setup when I ran into trouble getting it to tune. The customer support doesn’t end once the sale is made—they truly stand by their products.

2. A

Protected_User_11996d3a
Verified owner
September 6, 2026

★★★★★
★★★★★

100 Watt VHF UHF HF EmComm MagLoop

Verified review - view original

3. EF

Protected_User_bccfd019
Verified owner
July 27, 2026
★★★★★
★★★★★
100 Watt VHF UHF HF EmComm MagLoop

Verified review - view original

Works as advertised! I am completely satisfied with both the product and the service.

4. J

Protected_User_8622b404
Verified owner
July 13, 2026
★★★★★
★★★★★
100 Watt VHF UHF HF EmComm MagLoop

Verified review - view original

Excellent purchase. They accepted my proposed price, and delivered the antenna promptly. There was a problem with the legs, but Steven sent replacements quickly and they fit perfectly. Great service. The antenna works well though I am asking a lot of it, so far having to use it inside my house because of a strong HOA. It has me back on the air, though, after a 30 year absence! I am sure I will buy their products again. Thank you, Alpha Antenna.

5. NK

Protected_User_42ef5b13
Verified owner
July 13, 2026

★★★★★
★★★★★

100 Watt VHF UHF HF EmComm MagLoop

Verified review - view original

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