

Alpha Antenna merged our FMJ with the U.S. Army's AS-2259/GR into the portable MIL EmComm Enhanced FMJ Antenna. This tactical wide-band EMCOMM system for DX and NVIS. Perfect for broadband communications, this system is mounted low to the earth to increase ground wave radiation, and to lower the threat of DF signal detection and also the risk of being seen.

Can't afford full price?

Make An Offer (Without Options)

SPECIFICATIONS

The MIL-STD-188 M110a digital communications mode is rated at 25 watts continuous and bursts of 100 watts digital for up to 1 minute using the MIL-STD Data Modem Terminal (MS-DMT) and Automated Message Terminal (AMT) software applications.

- Frequency: 1.8-34.0 MHz (160m – 10m Amateur Radio bands)
- Height: 15 1/2 ft.
- Approximate Footprint: 68 ft x 68 ft
- Weight: 5 lbs.
- RF Connection: UHF Plug (SO239).
- Set up time: Less than 10 min.

FEATURES

- Tuner free operations
- Omni-directional DX to the HF Ground and NVIS EMCOMM patterns
- Deployment time to 10 minutes
- Weight of 5 pounds
- A 40-foot 50-ohm feedline
- Mast and a self-supporting tripod base
- Horizontal and Vertical Polarization
- Omni-directional signal pattern
- Integrated guying

INCLUDED EMCOMM COMPONENTS

1 – Telescopic heavy duty aluminum tripod in a non-padded equipment bag

10-160M Portable HF Antenna

1 – A second non-padded bag with the following in it:

1 – Auto Match, with:

- SO239 connector
- Top Mount; Female 3/8 24
- Side Ground bolt; Male 3/8 24
- Bottom Mounting Hardware: Female 5/8 11

1 – Seven section MilStick element is 9' 4" long (When storing, fold the whip starting from the top section.)

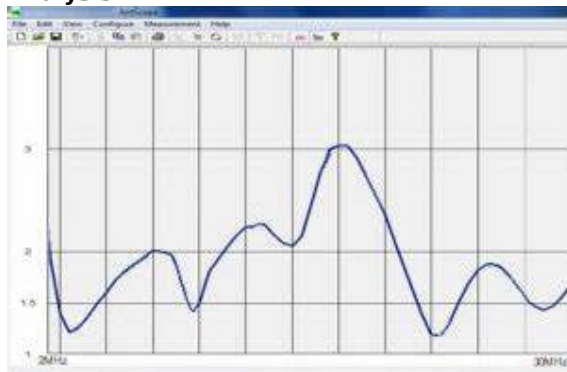
1 – 25 ft. NVIS element wire (35MPH wind rating when deployed with these elements.)

4 – 35' NVIS Elements (50MPH wind rating when guyed with these elements)

1 – 8 ft. Grounded counterpoise wire with ground stake

Analysis, Pattern, & Gain

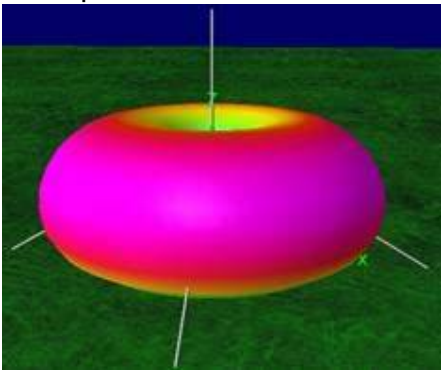
Analysis



10-160M Portable HF Antenna

Pattern

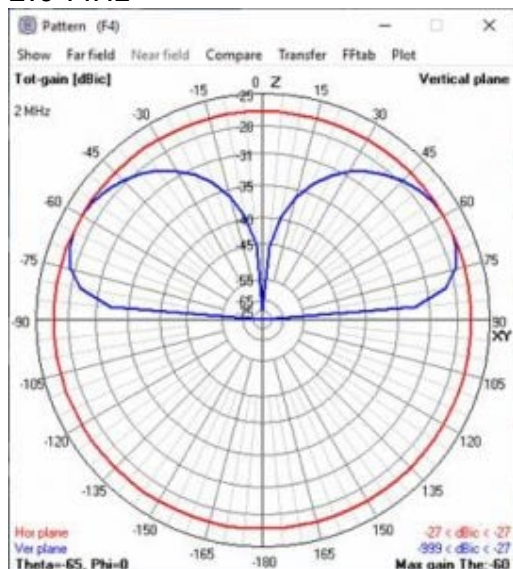
The Z1 - Z0 Vertical element provides Groundwave coverage while it simultaneously maintains a null above the antenna. This enables the Z0, X1 & 2, and Y1 & 2 NVIS elements to enhance consistent NVIS and Sky-wave patterns, which is universally represented in the above 'Elevation/Azimuth Pattern' & 'Modeled Pattern'. The Z0 - Z2 Grounded Counterpoise then completes the circuit, by providing a path to ground at the feed-point Z0.



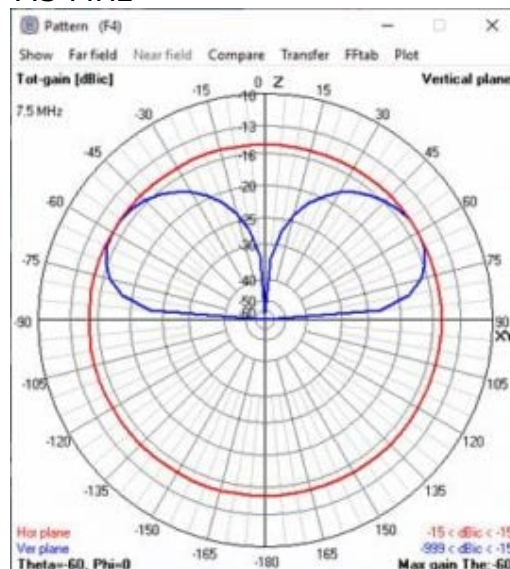
Gain

Some gain (directivity) is realized by the placement of the Z1 - Z0 Vertical element above the Z0, X1 & 2, and Y1 & 2 NVIS elements. For the most part, however, this antenna is onmi-directional, which results in negative gain when compared to a dipole. Fortunately, gain does not only come from antenna design. There is also "ground gain", which can add an approximate 6 dB of additional gain to the following gain figures also represented graphically here.

2.0 MHz

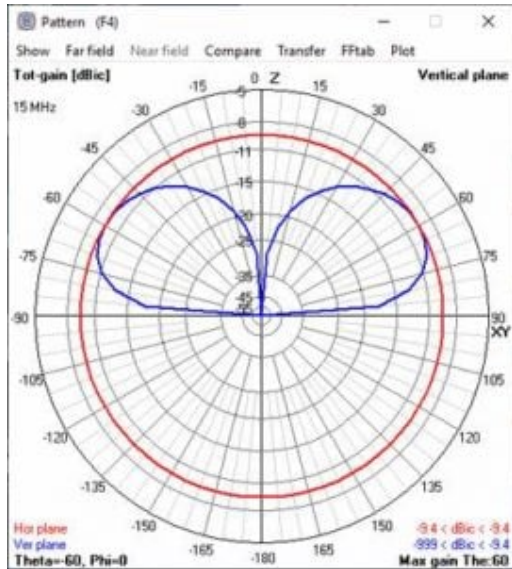


7.5 MHz

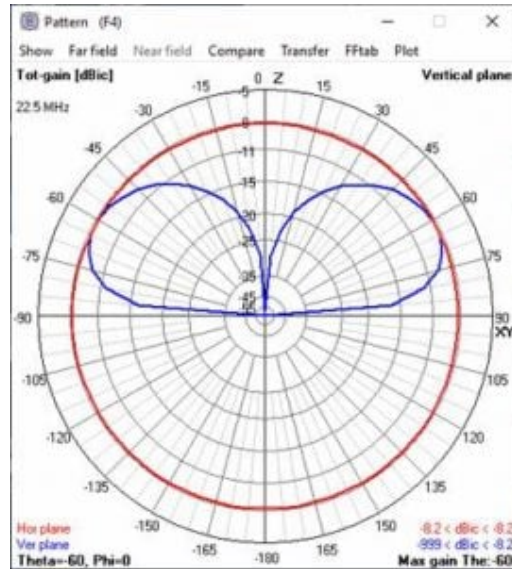


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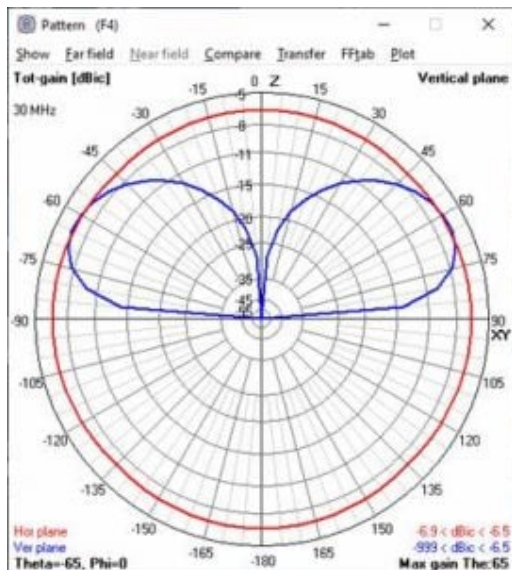
15 MHz



22.5 MHz



30 MHz



Learn More about Amateur Radio EmComm operations

Amateur Radio operators ([hams](#)) have informal and formal groups to coordinate EmComm response.

At the local level, hams may participate in local emergency organizations. They may organize local “traffic nets” using VHF (very high frequencies) and UHF (ultra-high frequencies). At the state level, hams are often involved with state emergency management operations.

Hams operate at the national level through the Radio Amateur Civil Emergency Service ([RACES](#)). This is coordinated through the Federal Emergency Management Agency ([FEMA](#)). This occurs through the Amateur Radio Emergency Service ([ARES](#)), which is coordinated through the American Radio Relay League ([ARRL](#)) and its field volunteers.

These individuals can participate in [SkyWarn](#) and operate under the National Weather Service (NWS). Here they provide emergency weather information to the NWS for analysis and dissemination to the public.

Reference: [CERT EmComm Network \(cert-emcomm.net\)](#)

We listen!

Specifications, prices, and descriptions are subject to change without notice.

REVIEWS

5.0



Based on 17 reviews

5★

100

100%

4★

0%

3★

0%

2★

0%

1★

0%

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1-5 of 17 reviews

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RR

1.

Protected_User_55c6fa1e

Verified owner

June 4, 2026



[10-160M Portable HF Antenna](#)

✖ Verified review - [view original](#) ✖

6 /04/26 – After reviewing the particulars of this antenna via their website and other users, I ordered same. The website was easy to navigate and I received timely notification of the shipment, with the delivery being within the time frame they specified. I found the antenna to be extremely well made, packable in the chosen carry bags and easily transported, and easy to assemble for use. Would recommend utilizing their padded carry bag in lieu of the thin transport bag. Best to you folks, Roger Bell N4FPA Pulaski VA

K

2.

Protected_User_5c882bac

Reviewer

May 19, 2023



[10-160M Portable HF Antenna](#)

I first used the Alpha DX Antenna on field day with my FT-897 and leisurely made over 800 contacts from Australia to Japan and all over the US plus other DX locales. Flat SWRs were easily achieved by using the methods in the most excellently written user guide. The horizontal elements are actually radiating elements and when you add the length of all the elements together you have a 40 meter $\frac{1}{4}$ wave antenna. It's no wonder this thing really outperforms my buddipole, which is fragile when compared to the Alpha DX Antenna. One of the cool things about the arrangement of the elements is that it's like having three L antenna systems, each pointing in a separate direction. I've found that the L antenna gives me the best combination for a take-off angle and performance for NVIS (horizontal elements) as well as DX (vertical element). The last note that I'll make is that the coil is located at the center of the antenna system, which if you know your antenna design and performance standards, it is either best to have the coil in the center or at the top of an antenna; never at the base!

K

3.

Protected_User_c300b369

Reviewer

January 15, 2023



10-160M Portable HF Antenna



[10-160M Portable HF Antenna](#)

5 months ago I saw my 'Elmer' set up his Alpha DX in less than 5 minutes and then witnessed how well it works! What also impressed me when I first saw it was how well the entire tripod, tuning bastion, and whips are built. Since buying mine in June, I can tell you that my Alpha DX has top quality build, it's easy to setup, and I work the world on my home-brew QRP CW Rig. My Elmer still says that after using at least six different portable antennas over the last 30 years, this one beats them all. I'd definitely recommend it to a friend!

K

4.

Protected_User_da651072

Reviewer

September 13, 2022



[10-160M Portable HF Antenna](#)

I received the Alpha DX Antenna and it was protected very well in its' package during shipping. The antenna came with three radiating elements and a single vertical element, all of which are heavy duty stainless steel telescopic whips. Next to come out of the box was a well suited tripod with a standard mount that included an SO239 and 24×3/2 stud. As for the tuning bastion, it is an ingenious peice of hardware that sits on top of the mount and into which all of the whips screw into seperate 24×3/8 studs. Included in the tuning bastion is a High Q coil that can be tapped with the clip for 6-40 meter operations. After taking about 5 minutes to setup the antenna system, the first thing I did was

hook up my antenna analyzer and use the included quick reference chart in the manual to tune the antenna, at the same time I placed a black or red magic marker tic mark on the coil for each band. Now to hook up the radio! Immediately I heard DX on 20 meters, made a couple of QSO's to Japan and New Zealand, then to Alabama and New Mexico. So, I switched over to 40 meters after I moved the clip and heard QSOs up and down the band like it was field day. I got response to every CQ I placed on 40 meters with signal reports never less than 5-7. I of course had to try this thing on 6 meters, which gave me 4 QSO's before I had to call it a night. What fun this antenna is, and easy to setup & use! I'd definitely recommend this to a friend.

K

5.

Protected_User_ac8a360d

Reviewer

May 12, 2022



[10-160M Portable HF Antenna](#)

It's not perfect but it's about as close as you'll find. Where to start? Well the tripod is as heavy as it is heavy duty. I guess it's perfect for the size of antenna it supports. The antenna has alot of load to it, especially after all four whips are extended. Those are some strong whips. I'd definitely guy the thing with some nylon ropes and secure the ropes very well. The performance is as big as the antenna and I'd put money on the fact that there isn't anything portable that can touch it. No matter what band I chose, this thing impressed the receivers at both ends. In other words, it transmits as well as it receives, which I'll tell you has always been between an S7 and S9. So I turned the power down to 5 watts and still got great reports on all of the bands. It's been alot of fun using this antenna and it'll be my go to antenna for true emergencies and daily communications. One of the things that some people remark about it that they

don't want to have to change the clip on a coil. That's not a bad thing, because having the coil gives the antenna a higher Q. A higher Q basically means that more of the power gets put out into the air. So if you have a QRP rig, this antenna will give you maximum performance. It's pretty awesome that there is a single vertical radiating element centered above three horizontal radiating elements. On EZNEC this gives the radiation pattern of three L antennas. So what's next? I guess I need to order the bag that is made for this antenna. I've heard good things about the quality of the bags from Alpha Antenna, and truthfully there are too many parts to not have some type of bag. By the way, I see that the Radio Society of Great Britain's review on the Alpha DX Antenna is now available at <http://www.AlphaAntenna.com>

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