Product Overview

Heavy-duty 10-80 meter HF vertical base system for permanent outdoor deployments.

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

Make An Offer (Without Options)

Key Specifications

Specification	Details
Coverage	3.5-30 MHz
Power	250W PEP SSB; 125W CW; 25W Digital
Vertical element	self-supporting telescopic six-section assembly
Active wire	25 ft
Grounded counterpoise	8 ft

Best For

- Permanent outdoor base deployments
- 10-80M multiband HF
- Operators wanting a rugged ProMaster configuration

What’s Included

- 24 x 5 x 1/4 in heavy-duty mount
- U-bolts
- Alpha Auto Match with SO-239
- Telescopic vertical
- 25 ft active wire + stakes
- 8 ft grounded counterpoise + ground stake

Setup and Operation

Mount to a suitable mast/post, extend the telescoping element, run the grounded counterpoise and 25-ft wire in opposite directions, then connect coax to the SO-239.

Performance and Technical Data

For 10 to 80 meters that is 1 wavelength on 10 meters, 1/2 wavelength on 20 meters, and 1/4 on 40 meters. Operation on 15 meters is enabled, because it is a third harmonic of 40 meters. Additional tuning for resonance on these bands, as well as 12 & 17 meters, is accomplished by way of the included matching network. We also include the other half of the system that completes the circuit at the antenna, which is the grounded counterpoise element. The combination of these components makes this system similar to an OCF (off-center fed) Dipole.

Analysis

Average SWRs

Band	SWR
10 Meters.	1.6:1.
12 Meters.	1.7:1.
15 Meters.	1.2:1.
17 Meters.	1.3:1.
20 Meters.	1.9:1.
30 Meters.	1.7:1.
40 Meters.	1.4:1.
60 Meters.	1.7:1.
80 Meters.	1.9:1.

Signal Pattern

Is in the direction the 8′ grounded counterpoise element is deployed and opposite the 25′ wire element, which acts as a reflector.

Elevation/Azimuth patterns

Options

Third-party masts

Place one of these optional masts approximately 3 feet in the ground:

Option 1 – Click Here for Home Depot – YARDGARD 1-3/8 in x 10 ft 6 in 17-Gauge Top Rail-328913DPT,

Option 2 – Click Here for Lowes – LG055 GL CP 1-3/8X10-6 SE in the Chain Link Fence Rail,

Option 3 – Click Here for True Value – Chain Link Top Rail, 1-3/8 In. x 10.5-Ft. | True Value.

Optional NVIS Kit

Activate lower band coverage and increase NVIS efficiency with the NVIS Kit.

Optional Tripod

The optionally available steel tripod has been tested for at least 2 years of continuous outdoor use, in non-saltwater environments. Our two-year outdoor test of this tripod revealed that it was still structurally sound and only showed signs of fading with some surface rust. That rust mainly appeared on and around its' nuts and bolts.

If mounted on the tripod, you should secure the antenna if it gets too windy, and although the ProMaster antenna can be deployed in saltwater environments, we do not recommend the tripod be used 24/7/365 around salt water.

Let's have a conversation

For the best multiband HF vertical antenna on air experience, simultaneously use the included elements that produce omnidirectional NVIS and directional DX.

Specifically, physically combining the HF Vertical aluminum mast and the wire NVIS element enhances high band directional DX (in the opposite direction the wire NVIS element is run) and mainly omnidirectional low band NVIS. Please note that the NVIS element should not lay on the ground but should slope away like a guy wire.

The included Grounded Counterpoise wire will run in the opposite direction of the wire NVIS element. This grounding then completes the balanced circuit at the antenna and provides a path to ground for common mode current and static build up on the elements.

(Note – Without the ground there would be no path for current, which means that there would be an open circuit and the system would not work as efficiently).

A low SWR across many bands is the nature of a well-balanced OCF Dipole that often uses a Balun. The ProMaster is, however, usable on many more bands because it:

1. Provides a balanced RF ground via the included 8′ grounded counterpoise wire,
2. enables balance by using 2 radiating elements, namely the 17’ 6” Vertical element and 25′ wire NVIS element,
3. uses a Balun where the impedance of each element is balanced,
4. Provides a feed-point with a SO239 for your feedline to provide a near 50-ohm match for your coax and equipment.

The result of this broadband design makes the ProMaster perfect for ALE (automatic link establishment) or Digital Spread Spectrum Encrypted modes. The ProMaster is also effective for all other HF modes including, but not limited to CW, SSB (USB/LSB), AM, etc.

You may also use an external antenna tuner if the ProMaster either:

1. Is installed over a poor ground,
2. parallels a metal structure,
3. is installed on a roof without adequate grounding, or
4. is not placed in a clear area.

LOSSES and CHOICES

Losses on an OCF Dipole do exist, where a Balun that begins to heat up as its transformer becomes saturated, resulting in an increase in ‘losses’ as the frequency is decreased. The transformer in the ProMaster will work to enable a very tunable SWR on the bands it is designed for.

Even a single band Dipole in free space will have loss due to resistance of the wire elements, and from a Balun that is needed (unless ladder line is used) to change the naturally occurring (approximate) 72 ohm impedance to 50 ohms. In this case, there will be less loss on lower bands compared to an OCF Dipole, due to the transformer that enables multi-band OCFD performance. Although ladder line has less loss than coax (especially for longer runs), you will eventually need to use a

tuner/Balun to convert it to 50 ohms, as this is what a modern-day rig's input/output requires.

The most popular way to get positive gain over a dipole is to install a beam on a tower, where like a Dipole, the beam would need to be mounted at 1/4 wavelength or higher to minimize losses, where a Balun to transform impedance would again be required and introduce losses.

A Vertical, which requires the real-estate to run the necessary radials, usually works well for DX, if you do not have obstructions around it. However, a Vertical is traditionally noisier, suffering from higher RFI (Radio Frequency Interference), which can hide a weak signal and cause loss of much of the NVIS capabilities that another antenna can provide.

So, which antenna should you choose?

Alpha Antenna recommends choosing an antenna based upon your:

1. band requirements,
2. physical needs,
3. and surrounding environmental restrictions.

Click Here for the Antenna Selection Tool for more choices.

Alpha Antenna will always answer your calls and emails. We are here to help if you need any assistance determining what antenna might work best for you and are available after you purchase your Alpha Antenna system.

If you want a 10-80 meter HF base antenna, which is forgiving on how it is installed and works well, then the ProMaster is the obvious choice for you.

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.

4.9

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Nice antenna, easy to setup.

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HF Vertical Antenna for 10-80M, ProMaster HD

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As advertised... outstanding performance especially with radials. As always Alpha Antenna provides quality products.

3. A

Protected_User_b1432e12
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March 30, 2026

HF Vertical Antenna for 10-80M, ProMaster HD

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Protected_User_c1346cb7
Verified owner
January 4, 2026

★★★★★
★★★★★

HF Vertical Antenna for 10-80M, ProMaster HD

Verified review - view original

Love it, installed it on a 6×6” post and used the fence for the NVIS wire. Loads up well and the noise is low on all bands and so far I’ve worked South Africa, most of Europe, New Zealand and Japan running FT8 on 40M and up with a 7300MK2 doing the tuning.

5. D

Protected_User_25eecea2
Verified owner
November 27, 2025

★★★★★
★★★★★

HF Vertical Antenna for 10-80M, ProMaster HD

Verified review - view original

Works well. Good band coverage.

Show more reviews (31)