This Digital VHF HF Military Vertical Dipole Antenna that provides 0-2500km of Digital mode coverage that is perfect for SCADA and Stealthy Covert deployments.

Key Specifications

Specification	Details
Coverage	1.8-7, 7-30, 144-148, 220-240 MHz TX/RX
Digital power	5W minimum; 30W maximum listed
Size	36 x 4 x 1.5 in
Antenna weight	22 oz

Best For

- Digital HF communications
- SCADA/remote monitoring
- Compact base, balcony, backpack or isolated deployments

What’s Included

- DuoPole broadband vertical-dipole system

Performance and Technical Data

Power Rating: 5W minimum digital input signal required with a maximum input power rating of 30W for Digital Modes. Including but not limited to the MIL-STD-188 M110a digital communications mode that is rated at 25 watts continuous with 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.

Calculated Gain Figures

250MW WSPR TX Results (7-30MHz)

Break-out of TX Results (Click Map to Enlarge)

USAGE SCENARIOS

Read About Using HF Frequencies to Monitor Remote Pipelines

Where secrecy is paramount, digital communications through unseen methods plays a crucial role. Clandestine usage scenarios that are enabled by this Military Vertical Dipole Antenna known as the DuoPole include:

1. Clandestine Communications in Cyber-Denied Environments:

- Context: In an era where internet-based communications are vulnerable to surveillance and attacks, intelligence operatives seek alternative methods.
- Scenario: Imagine a situation where an operative needs to communicate without exposing themselves to internet-based surveillance.
- Solution:
    - Physical Separation: Platforms physically separated from the internet can be used. These platforms are not susceptible to internet-based surveillance or attacks.
    - Radio Technology: Combine modern computer-based software with radio technology.
- Importance: Counterintelligence and law enforcement must adapt to these evolving communication methods.
- Countermeasures: Detect radio-based clandestine communications and secure evidence.

2. Operational Scenarios where concealment and minimizing visibility are critical:
    - Example: Monitoring a nearby building while parked outside.
        - Setup: Transmitter, receiver, and antennas positioned out of sight from windows.
    - Between Floors in an Office Building:
        - Example: Operating from the third floor to the first floor.
            - Setup: Transmitter, receiver, and antennas positioned out of sight carried out of site under clothing.
        - Out in the Open:
            - Example: Providing regional communications support while deployed in the field.

    - Setup: Transmitter, receiver, and antennas positioned out of sight inside a backpack.
3. Monitoring remote pipelines:
    - Read more about Using HF Frequencies to Monitor Remote Pipelines

SUMMARY

Clandestine antennas for digital communications are designed to operate covertly, avoiding detection by adversaries. Their success lies in striking a balance between effective communication and maintaining secrecy with a right sized antenna.

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 1 review
5★
100
100%
4★
0%
3★
0%
2★
0%
1★

0%

Customer photos and videos

Jerome Boasner

June 1, 2024

This system checked all of the boxes for a digital EmComm antenna. The rugged structure deployed in 60 seconds and has already withstood 80+MPH winds. Performance has been nation-wide based upon imperical testing using the ZachTech WSPR hardware.

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1. JB

   Protected_User_7c475fa7
   Reviewer
   June 1, 2024

   Digital Mode VHF HF Vertical

   This system checked all of the boxes for a digital EmComm antenna. The rugged structure deployed in 60 seconds and has already withstood 80+MPH

winds. Performance has been nation-wide based upon imperical testing using the ZachTech WSPR hardware.

