

## UAD™



A breakthrough extreme wideband antenna from the fractal antenna innovators: Up to 250W power handling and superior gain in a compact, rugged unit.

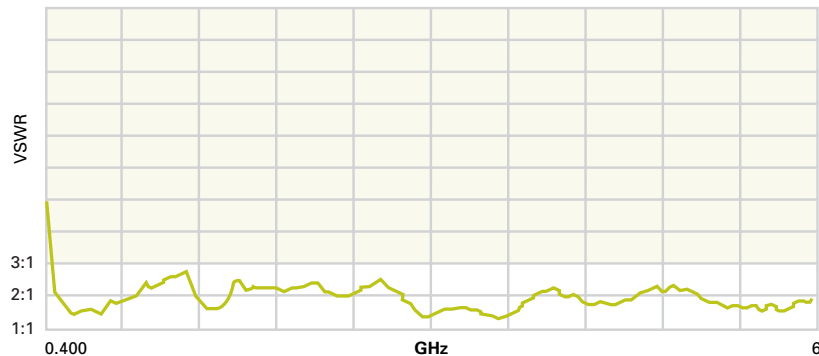
With a great standing wave ratio over a 15:1 range of frequency, the UAD antenna delivers excellent performance in a compact form factor for signal gathering and high power transmission in defense and intelligence applications.

Designed to be mounted on a vehicle roof, the UAD antenna is ruggedly built from the base through the internal components to the radome. The antenna will operate in extreme environments, works well with or without a ground plane (500 MHz cutoff), and can be used for outdoor applications. Designed for vehicle/roof mount, it can also easily be mounted on walls and ceilings.

The UAD antenna is also ideal for a variety of wireless and telecom needs from cellular to WLAN to UWB.

- **Universal Access™ Antenna**
- **Comms/security**
- **Commercial-Off-The-Shelf (COTS)**
- **Omnidirectional, linear polarization**
- **Unity gain or better (0 to 2.5 dBd)**
- **UHF through microwave**
- **VSWR 2.5:1 or better**
- **Inherently 50 Ohms**
- **Low phase dispersion**
- **7.7 inch diameter x 5.7 inch low profile radome**
- **Rugged design, weighs 2.5 lbs**
- **Input power up to 250W**
- **N type or SMA connector**
- **Color: customer preference**
- **Optional watertight vehicle mounting kit, P/N MK-UAD-UAB**
- **Part numbers:**  
100W: UAD-SP-640  
250W: UAD-HP-650

Excellent inherent VSWR over a very wide frequency range:



## OTHER PRODUCTS

### UGS™ Antenna

Unattended ground sensor (UGS) nodes must be low profile, lightweight and have the widest bandwidth, highest gain antenna possible. That's no easy task, yet Fractal Antenna Systems has the answer.

Integrating a single fractal antenna into an UGS node results in an easily deployed lightweight package that is less than a yard tall. Innovative raised phase center design minimizes ground losses while improving radiation pattern and launch angle. Excellent omnidirectional long-range performance means fewer nodes need to be deployed to effectively cover an area. The UGS fractal antenna is an excellent solution to the extreme RF challenges of unattended ground sensors.

### RFsabre™

With outstanding lower frequency gain and less than 3:1 VSWR over a very wide frequency range, the RFSabre antenna delivers great performance in a distinctly compact form factor. The vehicle-mounted version can survive impacts with solid objects at speeds up to 25 MPH. Geared for security, communications, signal gathering and high power transmit applications. New hanging or tripod mounted versions available.

### Custom Antennas

Fractal Antenna Systems offers custom antenna development for applications where small size, unusual form factor, and wideband or multiband performance is needed. Tell us what you need and we'll tell you what we can do. You will be amazed. The antenna shown here was developed for telemetry of in-car video from Indy Racing League cars.

## ABOUT FRACTAL ANTENNA SYSTEMS

Fractal Antenna Systems, Inc. (Fractal Antenna) develops and builds the most compact, highest performance wideband/multiband antennas in the world. Our antennas are typically two to four times smaller than traditional aeriels, while achieving unique frequency coverage and excellent gains and power patterns.

Fractal Antenna's patented geometric approach and design methodology are based on decades of experience and lead to innovative antennas not possible using conventional techniques. FRAGO, our proprietary evolutionary optimization tool, allows rapid analysis of millions of possible antenna candidates to assure the best solution.

Fractal Antenna's products have been proven in the toughest commercial, military, and government applications. In the military sector, we provide practical solutions for communications, intelligence, and electronic warfare. Fractal Antenna has been awarded contracts from DARPA, USAF, USMC, and USA-CECOM, among others. We provide OEM, custom, and off-the-shelf antennas that push the limits of gain, bandwidth, and size. Please contact us today to discuss your antenna needs.

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