Signal intelligence warfighters face a difficult challenge — the need to monitor communications over a very wide frequency range while remaining clandestine. Current electronic surveillance systems employ multiple antennas that are either large or noisy. Covertness and high performance are united in the Tranztenna™ optically transparent antenna: an extremely wideband antenna designed for vehicle or building window placement. This conformable, rugged, compact antenna is easy to transport and install in field operations. New missions to intercept and monitor enemy communications are possible with this breakthrough in transparent antenna technology.

- **Outstanding gain**
- **Transparent**
- **Conformable**
- **Only 13 x 18 inches**
- **VSWR less than 3:1**
- **Inherently 50 Ohms**
- **Optional frequency lowering panels**

Fractantenna technology, implemented in transparent conductive film, makes covert capability possible with a mission-capable antenna system that operates over a huge frequency range.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantage</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent</td>
<td>Visually unobtrusive</td>
<td>Covert use of antenna in vehicle or building window</td>
</tr>
<tr>
<td>Good Gain</td>
<td>Superior to ITO films</td>
<td>Excellent signal-to-noise ratio</td>
</tr>
<tr>
<td>Wideband</td>
<td>Operation over very wide frequency range</td>
<td>Instantaneously access most spectrum of interest</td>
</tr>
<tr>
<td>Compact Size</td>
<td>Effective use of small window apertures</td>
<td>Access to lower frequencies</td>
</tr>
<tr>
<td>Conformable</td>
<td>Flexible sheet</td>
<td>Easy transport and deployment</td>
</tr>
</tbody>
</table>

130 Third Avenue
Waltham, MA 02451 USA
781-275-2300
www.fractenna.com
Other Products

Universal Access™ Antenna
With excellent standing wave ratios over a 25:1+ range of frequency, the Universal Access family of antennas delivers superior performance in compact form factors. With versions for vehicle or mast mount, the Universal Access antennas are ruggedly built to operate in extreme environments. Targeted for signal gathering and high power transmit applications from VHF through microwave.

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 aerials, 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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