

## UHF - Coaxial Dipole

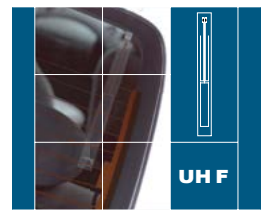
The **Laser Clear**\* transparent antenna is an innovation bought about by the need for discreet and high performance antennas used on wireless communication systems.

Since its original conception as a UHF (460MHz) antenna for unmarked police vehicles, this planar and transparent antenna, designed to be mounted inside the windshield, has been engineered to give exceptional broad-band performance. The design covers the 400 - 500MHz frequency band.

Its patented construction uses a conductive element on a clear and flexible substrate. The proprietary connector interfaces the antenna with RG174 coaxial cable for flexible installation ease.



Silver mylar strip added to antenna



400 - 500MHz

[www.laser-antenna.com](http://www.laser-antenna.com)

*“If you haven’t seen our Laser Clear products, then we’ve done a good job”*

www.laser-antenna.com

### TRANSPARENT

hence virtually invisible. Using our patented and proprietary manufacturing procedure, which forms a conductive circuit on a clear polyester backing.

### THEFT & VANDAL PROOF

being mounted on the inside of the windshield there is no opportunity for theft or vandalism. No problems with wind noise or car wash problems.

### EXCELLENT PERFORMANCE

compared to currently available “on-glass” wire antennas, superior performance in the order of 2~3dB is achieved through the geometry of the printed circuit artwork and the direct connection of the antenna to the coaxial cable as against the through-glass capacitive coupling used by external “on-glass” antennas.

### MULTI FUNCTION

the versatility of this antenna has found its way into a multitude of applications including but not limited to – trunking radio systems, Citizens Band Radio, data-monitoring stations, vehicle tracking.

\* Naming rights for OEM and other situations available

Features of this antenna are covered by

**US Patent No.:** 6,252,550 and 6,407,706 B2 **South Africa Patent No.:** 2002 / 5065

**EU Patent No.:** 0 903 805 **New Zealand Patent No.:** 519 721

**Patent Pend.:** Australia, China, Japan

**For Further Information**

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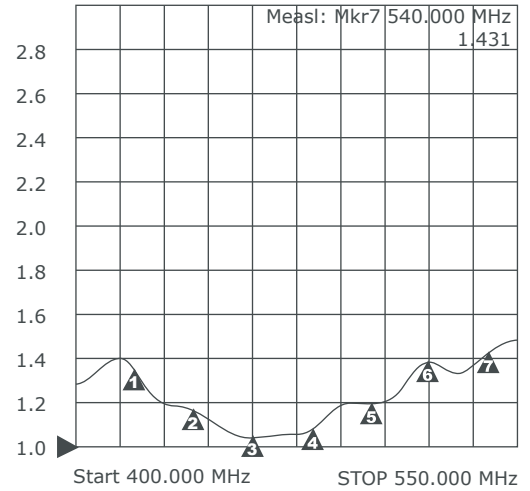
### Electrical

- Radiator:** Half-wave coaxial dipole with broadband active element.
- Bandwidth:** >50MHz
- Gain:** Unity (2.2dBi)
- VSWR:** <1.2:1 @ Band Center
- Polarisation:** Linear (vertical or horizontal)
- Max Power:** 25watts

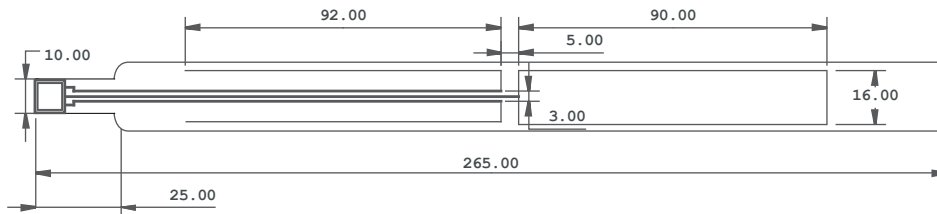
### Mechanical

- Radiating Element:** Silver ink track.
- Substrate:** Clear Polyester/Mylar film (180um).  
Not affected by UV.
- Adhesive/Dielectric:** 3M 467 Epoxy. This adhesive gets stronger over time and is not affected by UV.

▶ 1: Reflection SWR 0.2 / Ref 1.000 C  
 ▷ 2: Off



1: Mkr (MHz)	2: Mkr (MHz) dB
1: 420.000	1.357
2: 440.000	1.186
3: 460.000	1.059
4: 480.000	1.088
5: 500.000	1.199
6: 520.000	1.388
7> 540.000	1.431



**Typical Dimensions**  
 (actual dimension varies for different design center frequencies)



**Reverse Side**  
 (showing peel-off adhesive backing)