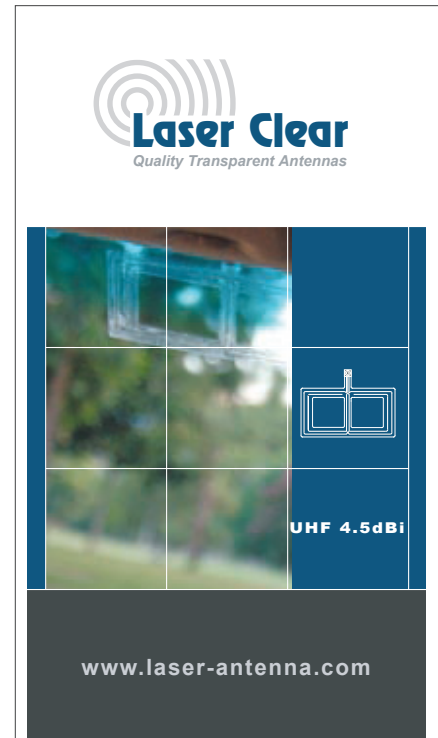


UHF - 4.5dBi

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 of the glass, has been engineered to give exceptional broad-band performance. The design can be adapted to any 30MHz bandwidth in the 390 ~ 520MHz frequency band.

Its patented construction uses a conductive element on a clear and flexible substrate. The geometrical pattern gives a gain of **4.5dBi** yet with **omni-directional** and **dual polarisation**.



“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 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

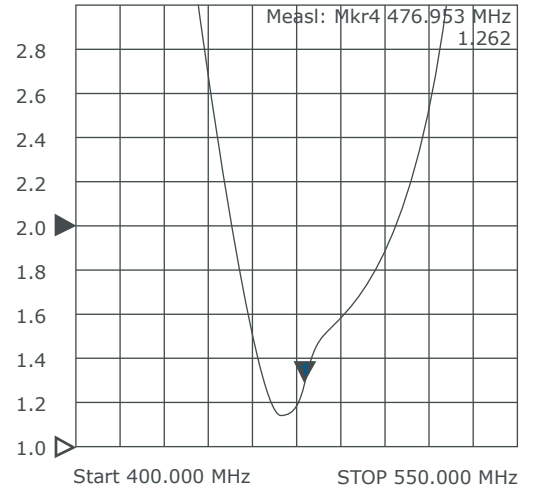
Electrical

- Radiator:** 2 x full-wave loop with common center element.
- Bandwidth:** >30MHz
- Gain:** 4.5dBi
- VSWR:** <1.2:1 @ Band Centers
- Polarisation:** Dual (vertical or horizontal)
- Max Power:** 25watts

Mechanical

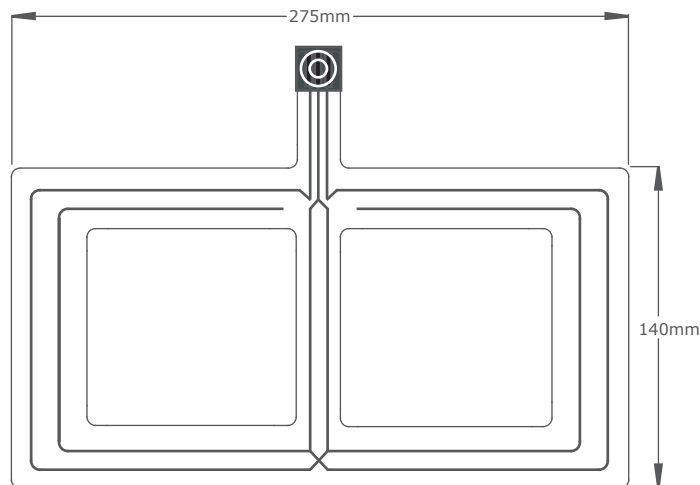
- Radiating Element:** Copper plated (10~15um) silver ink track.
- Substrate:** Clear Polyester/Mylar film (180um).
Not affected by UV.
- Adhesive/Dielectric:** 3M 467 Epoxy. This adhesive gets stronger over time and is not affected by UV.

- ▶ 1: Reflection SWR 0.2 / Ref 1.000
- ▶ 2: Transmission Log Mag 10.0 dB / Ref 0.00 dB



1: Mkr (MHz)	2: Mkr (MHz) dB
1 > 476.9533 1.262	

VSWR
(in this example for antenna with center frequency 470MHz)



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