



# Carbon Nanotube Heaters

Transparent electric heating film is typically constructed by "sandwiching" a conductive material between layers of glass or clear plastic, traditionally polycarbonate or acrylic. The challenge here is deploying a conductive material that has both sufficient conductivity AND transparency. Patterns or opaque layers affect visual performance, while insufficient conductivity limits heating speed and range.

DALB is bringing Printed Transparent heaters to the market through CHASM's AgeNT material which is available at <10 ohms/square and up to 95% visible light transparency. This product is ideal for heater applications in automotive, avionics, medical, electronics, kiosks, machine vision and more.

Whether it's for de-icing in harsh weather conditions or simply drying condensation, DALB can provide a material to meet a wide range of temperatures. CHASM's AgeNT materials are the only commercially available transparent conductive material capable of delivering the heat density required for a host of applications without wires.

## Applications

- Avionics
- Transportation
- Electronics
- Kiosks
- And more

## Benefits

- Screen Printed
- Lower design cost and lower unit cost
- Up to 3,000 watts/M2
- Up to 120° Celsius
- Obstruction free design (no microwire) for optimal pairing with Optical Cameras
- No need for laser ablation, deposition and patterning

Contact us for more information: [www.DALB.com](http://www.DALB.com)


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