

OPTICAL FILTERS

Hitrans Heater Panels

ZYTRONIC have developed a range of heated transparent panels for use with military, aerospace, medical and industrial displays.

Heating is achieved by passage of an electric current through either a transparent conductive coating or micro-fine wires (diameter <20 microns) embedded within the bonding interlayer of a glass or plastic laminate.

HITRANS Heater Panels offer:

- High Light Transmission.
- Low Reflectance.
- Environmental Stability.
- Monolithic Glass and Laminated Composites.
- Range of Controlled Power Densities.
- Curved or Flat in Glass or Polycarbonate.

Technical Characteristics

HITRANS heater panels manufactured using a transparent conductive coating are available as monolithic glass or laminated composites. For monolithic glass panels chemically or thermally strengthened glass is generally utilised.

The wire heating system is only available as a laminate.

The thickness of the heated panel ranges from 1mm to over 25mm, Polycarbonate heater panels are available but are only recommended for low power densities i.e. $<4.5\text{W}/\text{dm}^2$.

Specific Power Loading

Normally in the 4 to $16\text{W}/\text{dm}^2$ range.

Power Supply

The windows can be supplied for either DC or AC. The voltage needs to be specified in every case.

Connections

Termination is made by either flexible leads soldered to the bus bars at the edge of the glass or, terminal blocks bonded on to the surface.

Temperature Control

For high specific power loading ($>8\text{W}/\text{dm}^2$) the window must be protected against possible overheating by using sensing elements bonded inside the laminated glass or by a surface mounted thermostat.

Size

Sizes from 100mm x 100mm to 1000mm x 2000mm are available.

All HITRANS heated panels are manufactured to customer specifications only.