

Heating / De-Frosting & EMC Shielding windows

CVI Melles Griot has the capability to offer de-misting/defrosting windows by means of heating. This is typically used in systems that are likely to encounter variances in temperature or weather conditions.

There are two different ways of heating a window:

DIRECT

By using the bulk resistivity of Semiconductor materials such as Germanium and Silicon, a current can be passed directly through the material by means of busbar technology. Busbars can be manufactured to fit most thicknesses of window.

INDIRECT

Indirect heating is suitable for use where non-conducting materials are required in a system such as Zinc Sulphide. Heating can be achieved using insulated foil heaters. Foil heaters can be manufactured to a minimum width of approx. 6 mm.

POWER REQUIREMENTS

It is best to consider requirements for a system at an early stage. This way, CVI Melles Griot can offer advice on the power required and the best method for delivering heat into a window. Options to consider would be whether a current limiter or temperature control are required. Current/Voltage combinations should also be considered.

As each individual system has different requirements, we would recommend discussing your requirements with us prior to finalizing design.