



Discover how we can improve your instrumentation and supply chain experience today!

## KO | BRINGING QUALITY INTO FOCUS

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### Dichroic Hot Mirrors for UV & IR Sensitive Systems

Plastic materials may crack under the prolonged exposure to a UV light source... But not Knight Optical's Dichroic Hot Mirrors!

**Knight Optical** can supply you with high quality and cost effective [Dichroic Hot Mirrors](#) for use in optical systems where unwanted UV or IR light negatively impacts on the system quality. This includes [UV and IR Sensitive Systems](#), medical illumination and display fibre optics.

Prolonged exposure to UV light can cause degradation in plastic materials resulting in cracking and, eventually, mechanical failure. Exposure to IR can cause undesired thermal energy and heat into the system that can damage delicate components.

Dichroic hot mirrors solve this issue by reflecting UV and IR light away from the component, meaning cost

We hold a massive inventory of [Bandpass](#), [Long pass](#), [Short pass](#), [Band-blocking](#) and [Colour-correction filters](#).

- Stock sizes of 12.5mm and 25mm diameter; and 50x50mm squares x 1mmthk.
- 425mmdia stock sheets are kept in stock for your specific requirements.
- Custom shapes and sizes at short notice, in most cases turned around within 1 week.
- Coated on Borofloat substrates for excessive thermal shock applications.
- Alternative thickness substrates available.

#### Typical specs:

<b>Material:</b>	Borosilicate or equivalent, Sodalime
<b>Diameter Tolerance:</b>	+0.0/-0.20 mm
<b>Length/Width Tolerance:</b>	+/- 0.25mm
<b>Thickness Tolerance:</b>	+/-0.20mm
<b>Wavelength Range:</b>	300nm-1200nm dependant on type
<b>Wavelength Accuracy:</b>	+/- 5nm
<b>Transmission:</b>	Tmax=95% dependant on type and substrate

All our Dichroic Filters are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory, using our Varian Cary 5000 spectrophotometers which are fitted with a UMA. This allows us to work to the highest [QA standards](#) and meet the tolerance specifications on these **precision components**.

[Contact our technical sales team](#) to discover how Knight Optical's high quality Dichroic Filters and superior service can improve your instrumentation and supply chain experience.

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- View our [QA and metrology information](#)

- Watch our [Corporate Video](#)  
[View Our Corporate Brochure](#)