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KO | BRINGING QUALITY INTO FOCUS

Colour Glass Filters for CMOS sensors.

CMOS sensors are used within commercial grade Digital SLR cameras as a replacement for the more expensive CCD. These CMOS sensors are extremely sensitive to IR light, which can lead to discolouration. <u>IR cut filters</u> are used to block the IR light, meaning that photographs are taken with life-like colours. Colour Glass Filters can be used in variations of <u>Bandpass</u>, <u>Long pass</u> and <u>Short pass</u>, depending on which wavelengths of light need to be blocked resulting in different key areas being more easily distinguished.

Knight Optical offers Colour Glass and <u>IR cut filters</u> for such an application, with a wide range of band widths and cut on/off wavelengths. As above these are available as <u>Bandpass</u>, <u>Long pass</u> or <u>Short pass</u> filters and we can also offer customised filters with coatings specific to the wavelength of your choice.

We hold a massive inventory of IR cut, Bandpass, Long Pass and Short Pass filters:

- Stock sizes of 5-50mm diameter or 5-50mm length/width and 1mm thick
- Custom shapes and sizes available
- Alternative thickness substrates available.

Typical specs:

Material: Colour Glass and Borosilicate/D263T or equivalent

Diameter: +0.0 / -0.20 mm

Length/width: ± 0.20 mm

Thickness: ± 0.20 mm

Surface quality: <60-40 scratch/dig or <20:10 for HD cameras

Parallelism: <3 arcmin

Note:

Wavelength cut-on listed in table is transition cut-on wavelength (T=Tmax/2) Wavelength cut-off listed in table is transition cut-off wavelength (T=Tmax/2)

Wavelength peak is centre wavelength (specific to Bandpass Filters)

All our Colour Glass Filters are checked for quality in our state-of-the-art Metrology laboratory using our Varian Cary 5000 spectrophotomer's fitted with UMA, allowing us to work to the highest <u>QA standards</u> and meet the tolerance specifications on these **precision components**.

<u>Contact our technical sales team</u> to discover how Knight Optical's high quality Colour Glass Filters and superior service can improve your instrumentation and supply chain experience.

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- View our QA and metrology information
- Watch our <u>Corporate Video</u>
- View Our Corporate Brochure