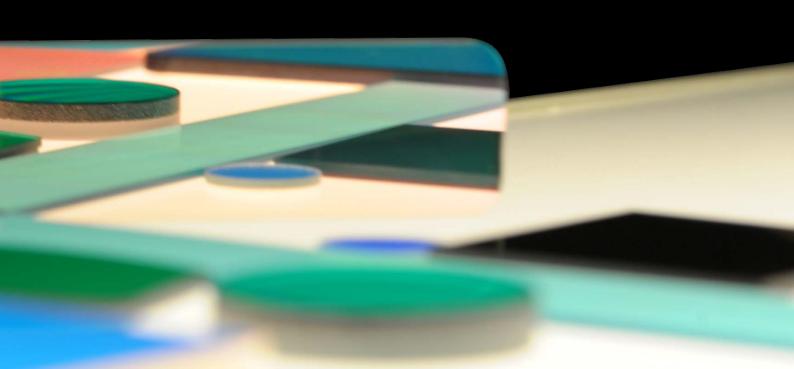


# **Commercial Optical Filters**





#### **OXLEY COMMERCIAL FILTERS**

Oxley Group has long been accepted as a world leader in the design and production of NVIS filters for aircraft modifications to enable the use of Night Vision Imaging Systems.

Oxley now offers a wide variety of high specification filter options to the commercial market, these have the excellent standard of quality that is synonymous with the Oxley brand.



### **TECHNOLOGY**

The Group has made significant investment in market leading equipment to produce optical thin film coatings. Oxley operates an e-beam evaporation box coating system with plasma assisted deposition to ensure excellent coating adhesion in any environment. Coating takes place in a class 10000 clean room which also houses state-of-the -art substrate cleaning and filter spectral measurement equipment. Filter dicing and cutting capabilities are also available. Oxley produces a range of standard filter types but also has the capability to design optical coatings for non-standard requirements.

#### STANDARD FILTER TYPES

The standard range of Oxley coated filters are produced on 1mm thick high quality borofloat substrate and are available in sizes of 25mm diameter and 25mm and 50mm squares. The majority of the following filters are available for the visible or infrared spectral regions.

- Broadband Anti-Reflection Filters used to reduce sunlight reflections from screens and displays or to improve the transmission of a window or lens.
- Longpass Filters used as colour selection filters, contrast enhancement or in conjunction with shortpass filters to produce custom bandpass filters
- Shortpass Filters used as colour selection filters, contrast enhancement or in conjunction with longpass filters to produce custom bandpass filters
- Bandpass Filters used to isolate certain wavelengths or reduce interference from unwanted wavelengths
- Cold Mirrors / Hot Mirrors used to transmit or reflect unwanted IR radiation (heat) from a system
- Reflective Neutral Density Filters used to reduce spectral output, either broadband or wavelength specific
- ITO windows Used for electrical continuity across the surface of a glass filter. EMC protection or heating / demisting

Please contact the Oxley sales team for detailed specifications of these filters. Oxley thin film coatings are available as standard on glass substrate.

Any of our standard finishes or coatings can be applied to the filter range. These include;

- Anti-reflection coatings
- EMI shield coatings (ITO) or mesh
- Diffusion
- Environmental protection coatings

Some filters in the range have these as standard, other finishes are also available.

## **APPLICATIONS**

Oxley commercial filters are suitable for the following types of application:

- Medical
- Scientific
- QA/Test
- Instrument manufacture
- Photography
- Astronomy
- Decorative lighting



#### QUALIFICATION AND TESTING

Oxley optical filters are proven in service and are developed to last the full life of the application. Designed to withstand the most challenging of environments, Oxley filters are subjected to strict environmental testing including: humidity, temperature cycling, salt, fog and vibration. All filters are inspected to the relevant assessment criteria for the application.

#### **HOW TO ORDER**

Filters are available to order directly through the Oxley sales team or through our global network of distributors. Please contact sales@oxleygroup.com or visit www.oxleygroup.com for more information.

## **CAPABILITY**

Oxley is a world class provider of advanced solutions for defence & aerospace applications. Specialists in LED lighting, night vision solutions, EMC filters, interconnect components and data capture products. Oxley offers comprehensive design, manufacturing and test facilities for electronic and electro-optic systems and components within the company's UK manufacturing centre and through Oxley Inc in the US.

#### **Oxley Developments Company Ltd**

Priory Park Ulverston Cumbria LA12 9QG United Kingdom t: +44 (0) 1229 483226 f: +44 (0) 1229 581851 e: sales@oxleygroup.com

#### Oxley Inc

31 Business Park Drive Branford CT 06405 USA t: +1 (203) 488 1033 f: +1 (203) 481 6971 e: info@oxleygroup.com