



MATERION



Optical Interference Filters
For Commercial Infrared
Applications

**BARR PRECISION OPTICS
& THIN FILM COATINGS**



Materion Barr Precision Optics & Thin Film Coatings is a leading manufacturer and supplier of precision optical filters, hybrid circuits, flexible thin films and custom thin film coating services. We offer coating solutions for manufacturers in the defense, commercial, space, science, astronomy and thermal imaging markets.

Optical Interference Filters for Commercial Infrared Applications

Materion is a recognized industry leader with over 25 years experience in the design and manufacture of custom IR interference filters. Materion can provide both small, prototype quantity as well as large OEM volume.



Materion's advanced technology in the manufacture of infrared optical filters offers noteworthy advantages:

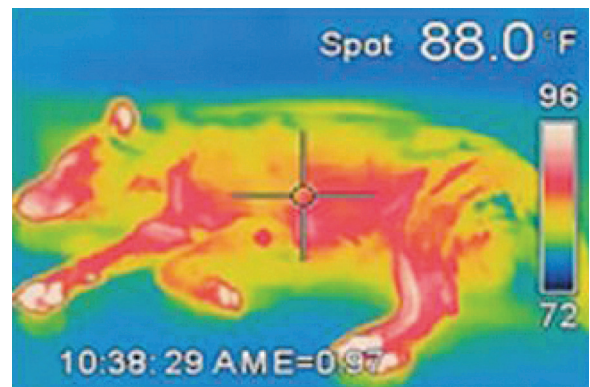
- Capability from near-IR through 30 microns
- Variety of filter types including narrow bandpass, wide bandpass, multiple bandpass, edge filters, beamsplitters, notch
- High transmission
- Wide blocking range
- Effective blocking for detector responsivity range
- Tight tolerancing available on spectral properties
- Image quality offered where requested
- Minimal temperature shift
- Wide operating temperature range
- Use at cryogenic temperatures
- Conformance to standard MIL standards for environmental exposure and durability
- Solderable-metalized coatings
- Wide range of sizes and shapes

Materion custom-designed infrared filters are used in a wide variety of photonic-related applications including:

- Safety applications – monitoring and detection of toxic and explosive gases
- Gas analysis including in automotive applications
- Detection of refrigerant gases
- Moisture analysis
- Optical detection of fire, flame, and explosion
- Motion and body heat detection
- Medical applications – anesthesiology
- Remote sensing
- Pyrometry
- Radiometry
- Thermal imaging

Available Filter Types:

- Bandpass filters and multiple bandpass filters
- Beamsplitters - dichroic, 50/50, other splitting ratios
- Edge filters - Longpass and Shortpass filters
- Notch filters
- AR Coatings
- Metallized/Solderable Coatings



Materion a global advanced materials company, dedicated to providing solutions that enable our customers' technologies and drive their growth. Our products include precious and non-precious specialty metals, precision optical filters, inorganic chemicals and powders, specialty coatings, specialty-engineered beryllium alloys, beryllium and beryllium composites, and engineered clad and plated metal systems. Materion business is structure to enhance our ability to provide customers with innovative, best total-cost solutions.

FOR PRECISION OPTICAL COATING PRODUCTS

2 Lyberty Way
Westford, MA 01886
Phone: +1 978.692.7513
www.materion.com/barroptics

FOR CUSTOM THIN FILM COATING PRODUCTS

153 Industrial Way
Buellton, CA 93427
Phone: +1 805.688.4949
www.materion.com/barroptics

MATERION CORPORATION

www.materion.com