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