# **Coatings for Imaging, Sensing & Scanning**

Abrisa Technologies offers coated solutions from the UV to the IR, designed for imaging, sensing, and laser scanning where high throughput efficiency, signal selection, contrast enhancement, color neutrality/correction, thermal management, electro-optical performance, and environmental robustness is required. Designs can be optimized to mate to CMOS cameras, to select signal, provide contrast enhancement, or alter spectral responsivity or output.

### **Broadband Wide Angle Anti-Reflection Coatings**

Our broadband anti-reflection coatings provide excellent optical imaging performance with design considerations for large angles of incidence up to 55 degrees, polarization bias, low specular and diffuse reflection, color neutrality, and tough environmental use compatibility.

- UV, VIS, VIS-NIR, SWIR, MWIR, LWIR
- Angles of Incidence up to 55 Degrees

### Narrow & Laser Line Anti-Reflection Coatings

LiDAR, image scanners, 3D additive manufacturing, telecom, emitter/receivers, and electro-optic devices need low reflection to avoid unwanted 3D print artifacts, ghosting or back reflections that interfere with detection. V-coatings with R < 0.1% work best for narrow line lasers, while U-coatings with R < 0.3 - 0.5%, are best for broader DLP's or diodes and large angles of incidence.

- 375, 405, 532, 633, 840, 904, 940, 1064, 1550nm, More
- Angles of Incidence up to 55 Degrees

### **Specialty Mirror Coatings - Autoclavable**

Many applications require mirrors for beam steering and folded beam paths in order to fit into small footprint handhelds, compact devices or UAV's, and with high reflectance delivered on small, thin and often, lightweight substrates. In the medical and dental industries, mirrors must also be bio-compatible and survive autoclaving with high heat and humidity. We specialize in dielectric mirrors specifically designed for use in tough environments.

- · High Reflectivity Broadband, Multiband, Laser Line
- Angle of Incidence from 0 to 60 Degrees
- Autoclavability & Water Spot Resistance

## **Filter Solutions**

Abrisa Technologies offers a wide variety of custom and cut-to-order filters for many applications from the UV to IR. Filters are often used for contrast enhancement in machine vision, signal separation at sensors, projected color or color temperature, separating or combining different spectral ranges for imaging, analysis or metrology. Filters are made from color glass, all dielectric, metallic or hybrid coatings.

- Bandpass: Dielectric, Coated Color Glass
- Color, RGB, CYM: Color Glass, Dielectric
- Color Temperature/Correction: Dielectric
- Defense: NVIS, Covert, Semi-Covert, Blackeye
- Dichroics, LWP, SWP: Dielectric



- Outdoor & Oleo/hydrophobic Options
- Accommodation for UV Curing/Bonding



- Outdoor & Oleo/Hydrophobic Options
- Epoxy, Graphics, Gasket, Bio-Compatible Options





- Bio-Compatibility, Chemical Resistance
- Low CTE & Thin Lightweight Technology Glass
- Abrasion & Scratch Resistance



- Hot & Cold Mirrors: Dielectric
- Neutral Density: Metallic/Reflective
- UV Blocking/Transmitting: Dielectric
- IR Blocking/Transmitting
- Custom Designs