FISBA Innovators in Photonics

Expertise in Optical Coating for Endoscopy

Standard and Custom-made Components and Systems

Broadband Antireflective Coatings

Endoscopy systems rely on refractive optics, employing precision optical surfaces to create compact lens systems. To mitigate the detrimental effects of Fresnel losses, it is imperative to apply specialized antireflection coatings within the visible spectral window. In recent years, spectral requirements have expanded to encompass near-infrared fluorescence, to address specific clinical objectives.

Protected Internal Silver Mirrors

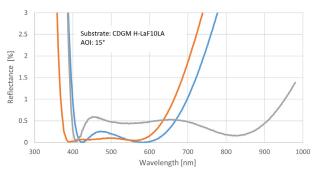
Endoscopic designs incorporate both forward-looking visualization and the capability to observe endoscopic scenarios from precise angles. Angular viewing design relies on prism reflection, and the angular deflection is executed within the confined dimensions of the optical system. This is made possible through strategically positioned protected silver mirrors, characterized by their high reflectivity.

Cemented Spectral Beamsplitter

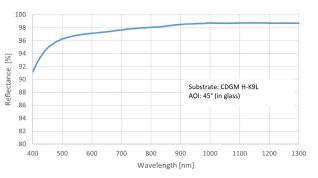
Image formation and visualization across distinct spectral bands can be achieved through the separation of optical paths using spectral beamsplitters. Endoscopic beamsplitters are custom-designed to meet the unique requirements of miniature chip-on-tip systems and proximal imagers.

Custom Coated Optics Design and Production

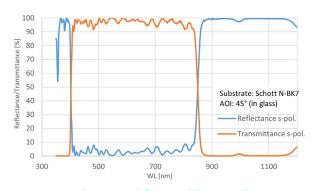
We support, design, develop and produce your required optic component and system with a specific coating. Our coatings are engineered to address the most demanding applications. All from one source.



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Protected Internal Silver Mirrors



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