Spatial Light Modulators – Diffractive Optics – LCOS Microdisplays

HOLOEYE Photonics AG is providing products and services in the fields of Spatial Light Modulators (SLM) for phase and amplitude modulation, customized design, fabrication and replication services for Diffractive Optical Elements (DOE) and LCOS microdisplay components for monochrome and color projection applications.

Spatial Light Modulators
HOLOEYE’s Spatial Light Modulator systems are mainly based on high-resolution reflective LCOS liquid crystal microdisplays. These devices can modulate light spatially in amplitude and/or phase. HOLOEYE developed and characterized a number of phase modulator products for high resolution holographic applications for the visible, near-infrared and telecommunication waveband.

HOLOEYE is providing customized design, fabrication and replication services of Diffractive Optical Elements. Besides that HOLOEYE also offers a broad range of standard DOEs with various patterns like dot arrays, dot-circles, circles, multi-lines, cross patterns and random dot patterns.

LCOS Microdisplay Components
The LCOS microdisplay division is providing manufactures in the field of technical optics, specifically technical projection, imaging, and display technologies, with LCOS microdisplay-hardware and electronics design services as component solutions.

HOLOEYE is specialized in the development of custom drive electronics, flex cables and display packages and also offers custom LC designs and display customizations for specific applications which have demands beyond standard projection displays.

Inrad Optics

Inrad Optics is a globally recognized, vertically-integrated optical solutions/ photonics manufacturer for over 45 years offering:

- Crystal based optical components and devices
- Customer optical components from both glass and metal
- Precision optical and opto-mechanical assemblies

Our Crystals and Crystal Devices business unit is a supplier to laser manufacturers, defense contractors, national laboratories, universities and scientists around the world for over 45 years. Our expertise is specialty and proprietary crystal growth and crystal component fabrication and applications. The Inrad Optics product line includes UV-transparent filters, electro-optic crystals, Pockels cells, non-linear optical crystals, devices and systems for harmonic generation of a wide variety of lasers.

Our Metal Optics business unit is a fully integrated precision metal optics and diamond-turned aspheric optics manufacturer. We are recognized throughout the industry as a preferred OEM supplier with the highest in-house quality precision specializing in CNC and single point diamond machining, optical polish, plating, beryllium machining and opto-mechanical assembly services.

Our Custom Optics business unit produces customer products manufactured specifically to customer requirements - includes: optical components, optical coatings (ultra-violet wavelengths through infrared) and subassemblies for military, aerospace, process control, photonic instrument and metrology end use. Planar, prismatic and spherical components are fabricated from glasses of all kinds, crystals of most kinds, and many component types. Electron beam, ion assisted and plasma assisted deposition are available for an extensive range of applications wavelengths.

Inrad Optics improves the world’s safety, security and scientific understanding by transforming challenging requirements into optical realities. Staffed by dedicated experts, we are recognized around the world for our deep knowledge, capabilities and precision required to meet the objectives of our clients.