



Innovations in Optics, Inc. Wins the Sapphire Award with its LumiDL™ Digital Micromirror Device (DMD) Illuminator.

Woburn, MA, October 21, 2021 - Innovations in Optics, Inc. wins the Sapphire Award in the category of Specialty Solid State Lighting Design with its LumiDL™ 3300B UV-LED DMD Illuminator. LumiDL™'s extremely high power in excess of 30W and highly uniform output enables unprecedented speed and resolution for UV DLP applications. LumiDL™, with its reliability and economic advantages, is quickly replacing lasers and arc lamps in applications such as maskless lithography and 3D printing. With nearly two thousand units installed in the field, LumiDL™ has proven to be a reliable light source for industrial and semiconductor applications.

The Sapphire Awards Program honors innovators and product developments that have advanced LED-centric SSL components, systems, and applications into the mainstream, and have promoted performance and capabilities beyond traditional light sources. Award winners for 2021 were recognized in August during the virtual Strategies in Light conference.

The patented, modular device couples a densely packed UV-LED array to a high efficiency, patented non-imaging collection optic integrated with a telecentric imaging optic optimized to the DLP chipset. Thermal management is handled by a proprietary heat sink and air/liquid-cooling designs to maintain low junction temperatures. The Field Replaceable Unit (FRU) light source can be customized to handle various UV photoresists with single or multi-wavelength LED options. LumiDL™ is sold as a kit, including the optics module and a driver. The optics module is easily mounted with kinematic registration on a flange mount. The FRU provides fast, easy light engine replacement, minimizing the need for re-alignment or adjustment.

About Innovations in Optics, Inc.

Founded in 1993 and located near Boston, Innovations in Optics, Inc. offers high power LED light sources for science and industry that provide maximum photon delivery, illumination uniformity, and stable optical power. With 55 international and U.S. patents, IOI products offer system-level advantages over lasers and arc lamps in OEM equipment for many applications. Available LED wavelengths range from the UV through the near-infrared, including broadband white and multispectral options. IOI light engines are used as excitation sources in fluorescent imaging for life science applications, and they support photomask exposure, direct image writing, 3D printing, and photocuring. Extreme brightness LED projectors enable 3D machine vision. Fiber-coupled light engines provide superior light delivery for industrial borescopes, medical endoscopes, microscopes, and UV spot curing.