Efficient coupling of LED light into fiber optics

- 2nd generation of LEDgine™ optics module brings more light to medical and custom-tailored applications

April 6, 2011 (Southbridge, MA) – The 2nd generation of SCHOTT’s LED light engine (LEDgine™ ) platform now offers twice as much light as before. Specifically developed for more efficient coupling of LED light into fiber optic bundles, it ideally illuminates active diameters from 3.0 to 6.0 mm. This makes the LEDgine™ optics module an excellent choice for medical applications, where small diameter light guides are commonly used.

The encapsulated LEDgine™ optics module that contains LEDs and focusing optics now features an integrated fan that ensures optimum cooling for a long lifetime. The even smaller footprint of the module allows easier integration into end-users systems, thanks to customized coupling adapters.

The light engine is made up of white High Brightness LEDs, which are focused onto the input of the light guide by specially developed focusing optics (patent pending). The high efficiency of the coupling system generates an extremely intense and homogeneous spot of light.

The separate control electronics have been optimized to lower energy consumption and enable portability when used with rechargeable batteries. It monitors the LEDs on the circuit board for over-temperature to ensure that the system remains functional for a long time. The external triggering option can be utilized to make fast movements visible. Driven by constant current, the light intensity of the LEDs can be continuously dimmed between 0 and 100%.

For applications that require the use of an additional filter to cut off a particular wavelength (i.e. for ophthal-
mic applications), a light guide adapter with integrated filter slider can be mounted onto the optics module. A customized flange for light guide coupling can be mounted to the front plane.

**About SCHOTT**

SCHOTT, an international technology group, has been developing and producing special glass, specialty materials, components, and systems for over 125 years.

The company’s core markets are the home appliance industry, solar power, pharmaceuticals, electronics, optics, the automotive industry and architecture. With its high-quality products and intelligent solutions, SCHOTT strives to contribute to its customers’ success and make SCHOTT part of everyone’s life. The company’s technological and economic expertise is closely linked with its social and ecological responsibility. At the same time, SCHOTT strongly supports the principles of sustainability. The SCHOTT Group maintains close proximity to its customers with manufacturing and sales companies in all major markets. Its workforce of approximately 17,500 employees generated worldwide sales of approximately $3.8 billion for the 2009/2010 fiscal year. SCHOTT AG is owned by the Carl Zeiss Foundation.

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The Business Unit SCHOTT Lighting and Imaging offers a wide range of Lighting and Imaging solutions for various applications.

The Medical product group realizes innovative solutions for various medical technology applications with the help of fiber optic and LED technology.

SCHOTT Medical LED light source, optics module.
Photo ID number: 96739

SCHOTT Medical LED light source, optics module.
Picture ID number: 96738
SCHOTT Medical LED light source, optics module.
Picture ID number: 96737

SCHOTT Medical LED light source, optics module.
Picture ID number: 96736

Surgical illumination via LEDgine™ optics module
Picture ID number: 11729

These pictures can be downloaded at:
http://www.schott-pictures.net/presskit/97342.ledgine-2nd-gen

More press pictures can be downloaded at: www.schott-pictures.net

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