

LightSmyth Expands Offering with New Nanophotonic Products for Telecom and Scientific Applications

New Products include Optical Grisms and Family of Diffractive Lenses and Beam Converters

SAN FRANCISCO, January 30, 2018 – LightSmyth® Technologies, the industry leader in high-efficiency diffraction gratings and diffractive optics, today introduced several new products including a monolithic optical grism and a family of all-dielectric diffractive lenses and beam converters for a variety of applications including telecom, microscopic imaging and computer generated holograms. See these products on display at Photonics West in San Francisco in LightSmyth's booth #4053, shared with Finisar, from January 30th through February 1st.

Optical Grisms

LightSmyth's new optical grism is a combination of a grating and a prism. The grating is patterned on one side of the prism which enables counteracting diffractive and refractive dispersions of light. Optical grisms are designed for use in applications such as microscopic imaging, astronomy, general spectroscopy, and telecommunications.

The new optical grisms maintain the same high standards as LightSmyth's transmission diffraction gratings. The grisms are monolithic and contain no epoxy or organic materials and must pass a rigorous reliability qualification process which allows them to withstand high optical power and temperatures up to 550 C°.

The grisms are available in both transmission or reflection configuration and may be optimized for single polarization or made polarization independent.

Diffractive Lenses and Beam Converters

LightSmyth's new family of all-dielectric diffractive lenses and beam converters uses the company's proven Deep UltraViolet (DUV) photolithography patterning process. The components convert an arbitrary input wavefront to an arbitrary output wavefront with high efficiency in a micron-thick layer of metamaterial. This new line has several applications including aberration corrected microlenses, top hat generators, phase converters, and computer generated holograms.

The diffractive elements are etched directly into the substrate and contain no organic materials, providing the same reliability, power handling, environmental stability, and robust mechanical properties found in all LightSmyth products.

For more information about these products, visit <http://www.lightsmyth.com/>.

About LightSmyth

LightSmyth® Technologies, a Finisar Company, was founded in June of 2000 to develop

innovative nanophotonic products. The development efforts culminated in the introduction of high efficiency diffraction grating for optical telecommunications, defense and biological markets in 2007. Today, LightSmyth offers more than 100 grating products optimized for various applications. LightSmyth products and innovations leverage holographic and diffractive principles combines with state-of-the-art semiconductor manufacturing patterning tools such as Deep Ultra Violet (DUV) scanners and Reactive Ion Etch.

Press Contact

Victoria McDonald

Director, Corporate Communications

press@finisar.com

###