

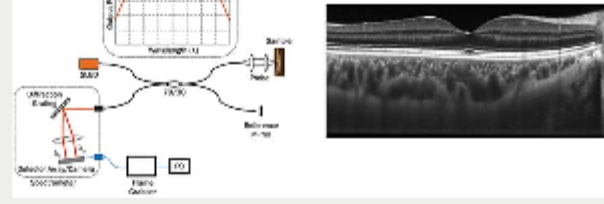
PHOTONICS spectra



Monthly newsletter from the editors of Photonics Spectra, with features, popular topics, new products, and what's coming in the next issue.

Superluminescent LEDs Bridge the Gap

Superluminescent light-emitting diodes are broadband semiconductor devices that are closely related to their more commonly known relatives, laser diodes and light-emitting diodes. Superluminescent LEDs offer distinct optical attributes compared to LEDs and laser diodes and are the preferred choice for imaging applications that call for reduced speckle and minimal interference noise.



[Read Article](#) [f](#) [in](#) [t](#)

Free-Space Optical Communications Comes of Age

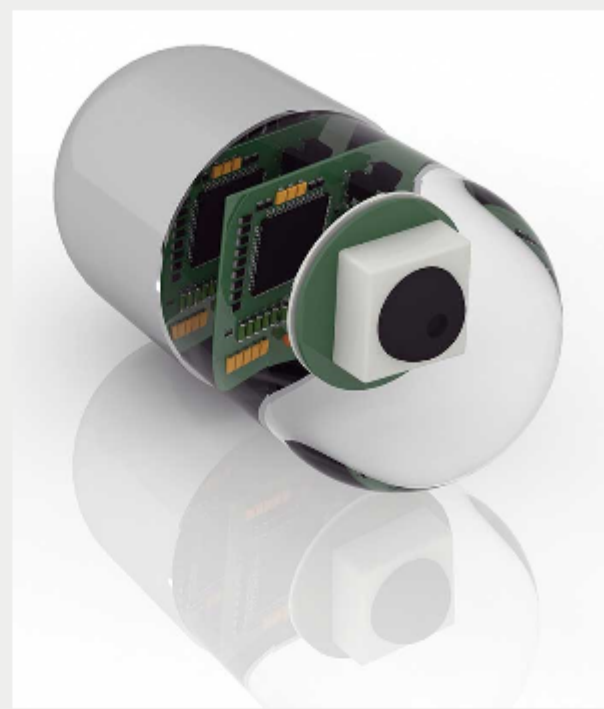
It has taken a few decades for engineers to achieve a critical mass of system concepts and technologies for free-space optical communications. Developers around the world have now demonstrated all the most challenging parts of the technology, and we can now state that free-space optical communications is finally taking hold in a number of classical and novel markets.



[Read Article](#) [f](#) [in](#) [t](#)

Added Intelligence Transforms Medical Sensors Into Diagnostic Devices

As sensors shrink in size, they are able to reach places that were previously inaccessible — such as inside the human body. What is more, incorporating such increasingly tiny sensors within a medical device means there is more space left for added functionality. Medical devices of the future will not only have the capacity to sense but will also perform meaningful analysis and diagnostics.



[Read Article](#) [f](#) [in](#) [t](#)

sensors expo & conference 2017
 JUNE 27-29
 McENERY CONVENTION CENTER
 SAN JOSE, CA
[Register Now!](#)

sponsors

Are you an author looking for a publisher?
 Tell us about your book idea.

store.photonics.com

In Case You Missed It

A Faster Single-Pixel Camera for Lensless Imaging

Compressed-sensing imaging systems, unlike conventional cameras, don't require lenses, making them potentially useful in harsh environments of in applications that use wavelengths of light outside the visible spectrum.



[Read Article](#) [f](#) [in](#) [t](#)

Imaging Array Captures Details as Small as a Fingerprint from a Distance

A camera that can capture a detailed micron-resolution image from a distance uses a laser and techniques that borrow from holography, microscopy and "Matrix"-style bullet time.

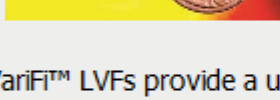
[Read Article](#) [f](#) [in](#) [t](#)

High-Speed IR Detectors Aid Ballistic Testing

Next-generation high-speed IR readouts and new detector materials give IR cameras the needed speed and dynamic range for high-speed thermal testing on the range.

[Read Article](#) [f](#) [in](#) [t](#)

Featured Products



VariFi Precision: LVFs from REO

Research Electro-Optics Inc. (REO)
 VariFi™ LVFs provide a unique rugged low cost solution for spectral measurement, enabling custom instruments and mini and micro-spectrometers. VariFi™ LVFs also minimize background noise and higher order effects. With dimensions as small as 1mm, these filters open a broad range of new possibilities enabling the technology for enhancements and new applications in spectroscopy, LIDAR, wavelength instruments and biomedical instrumentation.

[Visit Website](#) [Request Info](#)



Conoscope Lens for Viewing Angle

Radiant Vision Systems, Test & Measurement

The Radiant Vision Systems conoscope lens enables high-resolution photopic measurement of the angular distribution of color, luminance, and contrast of displays and display components. Fourier optics map a light-emitting spot on a display to the connected camera's CCD so that each pixel corresponds to a different emission angle.

[Visit Website](#) [Request Info](#)



CITE - A 12-Lecture Course in Technology Commercialization

Photonics Media

This 12-lecture digital course is for anyone involved in technology development and the business development opportunities based on technology. CITE provides a roadmap and methodology for moving advanced technology into successful commercial products and provides a view of current and future hot areas for investor funding.

[Visit Website](#) [Request Info](#)



3D Scan System with Variable Image Field

SCANLAB GmbH

SCANLAB will introduce, at the LASER World of PHOTONICS Show in Munich, the powerSCAN II – a new 3D scan solution for industrial cutting and welding applications using CO2 lasers. This 50-mm system offers small spot sizes combined with large working fields.

[Visit Website](#) [Request Info](#)

Featured Video

Radiant Vision Systems - Automated Visual Inspection in LCD Production

See how Radiant Vision Systems imaging photometers and colorimeters are applied at each stage in the production of LCD display devices. ProMetric® imaging systems offer the highest resolution to detect light, color, and surface defects as early as possible on the line, facilitating lean operations through improved efficiency, optimized cost and materials, and absolute quality of devices from display to final mechanical assembly.



[Watch Now](#)

Webinars

Introduction to Machine Vision Software

Thu, May 11, 2017 1:00 PM - 2:00 PM EDT

Learn how to best utilize software to integrate and optimize a machine vision solution across a variety of industries, including pharmaceuticals, packaging, electronics and manufacturing. Presenter Tom Brennan, an AIA Advanced Level Certified Vision Professional, will cover several machine vision software approaches and algorithms including image processing and color vision, image processing, parallel programming, and artificial intelligence. Brennan will show attendees how these algorithms and methods enable new technologies such as vision guided robotics, high-speed imaging, thermal/IR imaging and 3D imaging. This webinar is sponsored by Euresys s.a.



[Register Now](#)

Coming in June...

Features

The Connected World Issue; Wearables (Sensors); IoT (MEMS Sensors); Smart Lighting (LEDs, Sensors); Precision Agriculture (Imaging, Spectroscopy); Mobile Health Sensing (Sensors); Free Space Laser Communication (Laser, Optics)

Issue Bonus

Munich Insider's Guide; Microscopy in Focus, with directory; Enhanced Advertiser Listing; Market Report; Supplier New Product Report

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazine *Photonics Spectra*. Please submit an informal 100-word abstract to Managing Editor Mike Wheeler at mike.wheeler@photonics.com or use our online submission form www.photonics.com/submitfeature.aspx.

About Photonics Spectra



Since 1967, *Photonics Spectra* magazine has defined the science and industry of photonics, providing both technical and practical information for every aspect of the global industry and promoting an international dialogue among the engineers, scientists and end users who develop, commercialize and buy photonics products.

Stay current with a **FREE subscription** to the digital or print edition.

[View Digital Edition](#) [Subscribe Free](#)

Questions: info@photonics.com

[Unsubscribe](#) | [Subscribe](#) | [Web Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949
 © 1996 - 2017 Laurin Publishing. All rights reserved. Photonics.com is Registered with the U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.