



Mantova, Italy, 2015 March 27th - **Opto Engineering • THE TELECENTRIC COMPANY**, announced today that its **View-through system** was recognized among the best in the industry by the judges of the **Vision Systems Design 2015 Innovators Awards** program. The judging panel consisted of esteemed experts from system integrator and end-user companies.

“On behalf of the Vision Systems Design Innovator Awards, I would like to congratulate Opto Engineering on their SILVER award. This competitive, unbiased program celebrates the most innovative products and services in the vision and image processing industry. The team at Opto Engineering should be very proud.”

Alan Bergstein, Vision Systems Design Group Publisher

About the product

View through system is a compact space-saving unique illumination solution designed to illuminate two sides of an object almost simultaneously. It consists of two symmetrical modules, each one made of two illumination units:

- A diffusive strobed dome illuminator (white color)
- A special active “view-through” backlight unit (white color)

View through system is designed to create very compact inline inspection solutions that illuminate both sides of fast-moving objects. While one camera acquires the image of one side of an object, the corresponding dome and special backlight units emit light simultaneously so that one side of the object can be inspected. Subsequently the dome and the backlight units are turned off so that the second camera can acquire the image of

the other side of the object while its corresponding dome and special backlight units are now switched on.

Such innovative approach can be achieved thanks to the **special backlight units** which act either as transparent windows (when the light source is turned off) or as backlights (when the same light source is turned on) and enables to quickly and accurately inspect fast-moving objects almost simultaneously, in a very compact solution.

View through system can be used for many different inspections, especially **for identification of surface defects/features with applications** spanning from automotive to pharmaceutical.

View through system is available as LVTVA1-W, which consists of two dome units and two active backlight “view-through” units (white color) or as LVTBENCH, a complete bench solution

which additionally includes a base plate with two right-angle brackets, the LTDV6CH compatible strobe controller (programmable) and the ADPT001 RS485-USB adapter. Each of the six channels of LTDV6CH can be individually configured to output pulses based either on a discrete external trigger signal or an internally-generated trigger by means of a configuration software (included).

View-through systems are very compact and space saving illumination solutions, allowing machine builders and system integrators to design and develop very compact inspection stations in industrial environments.

View-through system consists of high power illuminators (domes and special backlights) that lighten very fast moving objects: images can be acquired with **exposure times as short as tens of μs**. As an example, View-through systems

are successfully integrated together with 50 mm fixed focal length lenses F/4 and standard industrial cameras in machines inspecting rolling parts (e.g. rubber balls with diameter of few millimeters) processed at more than 10 pcs/s with exposure times equal to 30 μ s. This ensures perfectly focused images of fast-moving parts.

Concerning illumination performance: the dome units achieve homogeneous diffusive pattern while active backlight units minimize border effects providing easy recognition of the object silhouette thanks to their unique optical core.

Unique features of this product

ACTIVE BACKLIGHT TECHNOLOGY: the core of the special backlight units is their optical design: each optical module consists of a sandwich of several layers that collect side-fired LED light conveying it along the optical axis of the system.

The special backlight units act either as transparent windows (when the light source is turned off) or as backlights (when the same light source is turned on).

INTELLIGENT TRIGGER MANAGEMENT: combined with LTDV6CH strobe controller, View-through system can be triggered by one single source signal since LTDV6CH generates both the signals that drive the two cameras. Complete timing management is available through serial programming.

About Vision Systems Design

Published since 1996, Vision Systems Design is a global resource for engineers, engineering managers and systems integrators that provides comprehensive global coverage of vision systems technologies, applications, and markets. Vision Systems Design's magazine, website (www.vision-systems.com), email newsletters and webcasts report on and analyze the latest technology and business developments and trends in the worldwide machine vision and image processing industry.

About The Vision Systems Design 2015 Innovators Awards program

The Vision Systems Design 2015 Innovators Awards program reviews and recognized the most innovative products and services in the vision and image processing industry. High-scoring companies were announced at AUTOMATE 2015 held in Chicago, IL, USA. Criteria used in the Innovators Awards ranking included: originality, innovation; impact on designers, systems integrators and end-users; fulfilling a need in the market that hasn't been addressed, leveraging a novel technology, and increasing productivity.

About Opto Engineering

Opto Engineering merges old craftsmanship still needed for precision optics and fresh, innovative concepts and technologies.

For Opto Engineering, *innovation* means smart design and engineering, as well as a business model targeted at excellent quality/price ratios and at the fastest response to the market demands.

People in our company **bring their expertise to continuously improve** our unique project development protocol in which **optics, mechanics, manufacturing and system integration** are always taken into account at every stage of the process.

Opto Engineering aims at satisfying customers with products and technologies that **offer real value in terms of superior performances, unique features and competitive prices:** every Opto Engineering branded product is the result of our own concepts and our passion for innovative optics development.

Opto Engineering pays utmost attention to its partners and human resources. Opto Engineering operates worldwide: sales are supported by the most valued distributors in every territory and manufacturing processes benefits from an international network of suppliers carefully selected for each technology.

Opto Engineering pays great attention to quality control management by continuously investing in the development of testing instrumentation and personnel training.

Opto Engineering also invests in its people, who are committed to supporting the continuous improvement of all the key aspects of the company business through their skills and ideas.

Our fairness in managing relationships with our employees, suppliers and customers is made even stronger by our strategy and actions which are not simply addressed to turnover or profit increase. We rather put our focus on creating "value" by first developing and improving our products and processes, then sharing this value with our customers or partners and finally returning the benefits of our job to the network we are a part of. On such basis, we keep establishing successful human and business relationships all over the world.

For all these reasons Opto Engineering has become the partner of choice in high-end optical applications for many of the major machine vision companies worldwide.

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