Welcome to the optics.org Product Focus which we have published specifically for Photonics West 2014 in partnership with SPIE and the Photonics West Show Daily.

Here you will find an effective at-a-glance guide to some of the latest products available on the market with booth numbers if available making it easy for you to check out the products for yourself.

**ID Quantique SA**

ID120 series consists of compact and affordable single-photon detector modules

ID-Quantique’s ID120 series consists of compact and affordable single-photon detector modules, based on reliable silicon avalanche photodiodes that are sensitive in the visible spectral range. Key advantages of the ID120 module are high quantum efficiency up to 80% at 800nm (80% of 1550nm), a 500 microns large active area and adjustable settings like temperature, excess bias voltage and deadtime. Thus, the customer has a complete control on dark count rate, quantum efficiency and afterpulsing rate, through an USB connection (Labview).

Contact Details: Michael Désert, ID Quantique SA, Ch, de la Marbrerie, 3, 1227 Carouge/Geneva, Suisse/Switzerland www.idquantique.com info@idquantique.com Tel: +41 22 301 83 71 Fax: +41 22 301 83 79

**Logitech Limited**

Akribis-air: The Intelligent Sample Preparation System

Logitech is proud to launch Akribis-air, a highly automated lapping and polishing system, designed for the processing of materials used within photonics based applications. Akribis-air delivers key benefits such as:

- The highest degree of geometric precision, flatness and parallelism.
- Exceptional quality, accuracy and reliability of samples.
- Real time data feedback.
- Faster removal rates and higher throughput.
- More efficient use of consumable products.
- Minimal set-up and clean-up time.
- Increased user safety.

Contact Details: Logitech Limited, Enrike Ferry Road, Old Kilpatrick, Glasgow G56 3EU Scotland www.logitech.uk.com enquiries@logitech.uk.com Tel: +44 (0) 1389 875444

**ALTECHNA**

ULTRAFAST LASER MIRRORS

Ultrafast mirrors are designed for femtosecond applications to provide an optimized performance at certain wavelength and angle of incidence (AOD). This is achieved by careful selection of coating stacks to combine high reflectivity and low GDD value. Such coatings are used for external beam manipulation applications where pulse broadening effect is undesirable. Ultrafast mirrors are intended for Ti:Sapphire, Yb:KGW, Yb:KYW or other lasers working in femtosecond regime.

Characteristics:

- High reflectivity: R>99.8 % at designed wavelengths
- High damage threshold
- Ultra-low group velocity dispersion

Contact Details: UAB ALTECHNA, Mokslininku st. 6A, 08412 Vilnius, Lithuania www.altechna.com info@altechna.com Tel: +370 5 2725738 US Tel: +1 408 372 1513 Fax: +370 5 2723704

**Diverse Optics Inc.**

Custom Precision Polymer Optics

When you’re looking for precision polymer optics to reduce cost, trim weight, simplify design and improve performance, come to Diverse Optics. We specialize in diamond turning (SPDT) and precision injection molding of custom polymer optics. Prototype to series production of spheres, aspheres, domes, convex/concave, plano/convex, bi-convex, free-forms, aspheric, spherical, long pipes, cylinders, lens arrays, collimators, combinations, toroids, CPC’s, TIR’s, micro-optics, mirrors, parabolics, off-axis, ellipsoids, cylinders, and more. Whether it’s diamond turned prototypes or thousands of molded optics, we’ll show you how polymer optics are perfected.

Contact Details: Diverse Optics Inc., 10310 Regis Court, Rancho Cucamonga, CA 91730 www.diverseoptics.com info@diverseoptics.com Tel: +1 (909) 596-9330 Fax: +1 (909) 596-1432

**Navitar**

New Bi-Telecentric Lenses by Navitar

The Magnistar® bi-telecentric lens line includes six high-resolution, low distortion C-mount lenses with built-in adjustable iris, designed specifically for measurement and inspection applications that require extreme precision. Magnifications include 0.128X, 0.528X, 0.05X, 0.243X, 1X and 2X. The lenses offer high telecentricity, excellent MTF performance, no parallax error and less than 0.1% image distortion.


Stop by Booth #502 for more information.

Contact Details: Navitar, Inc., 200 Commerce Drive, Rochester, New York 14623 USA www.navitar.com info@navitar.com Tel: +1 (585) 359-4000 Toll-free: 800-828-6778

**CMOSIS**

12-Megapixel 3fps CMOS image sensor CMV12000

CMOSIS, the leading European supplier of advanced CMOS image sensors, is demonstrating its 12-Megapixel/3fps CMOS image sensor CMV12000, which is now available in sample quantities. High volume production will ramp up from June 2014 onwards. The CMV12000 meets current market solutions with a combination of excellent global shuttering with a stunning 300 fps at full resolution serving a broad range of applications like broadcasting, intelligent traffic solutions, machine vision and motion capture.

At Photonics West 2014, CMOSIS exhibits at the Moscone Center, Booth 109.

Contact Details: CMOSIS, Covellistraat 15, Antwerp, Belgium www.cmosis.com info@cmosis.com Tel: +32 3 260 17 30

All this information and more can be found on the optics.org website. Simply go to www.optics.org for all the latest product and application news.

Alternatively, why not sign up to our free weekly newsletter (www.optics.org/newsletter) and get the information delivered direct.

Daily coverage of the optics and photonics industry and the markets that it serves
CILAS
Deformable Mirrors for the largest telescopes in the world
CILAS has developed Deformable Mirrors for the largest telescopes in the world, and continually improved the Adaptive Optics technology to serve Astronomy, High Power Laser and Space applications. "Monomorph" mirrors allow the correction of the optical aberrations induced in a high power laser chain, while avoiding both "pin through" effect and energy distribution misalignments. Standard Monomorph Mirrors are available for diameters from 30 to 85 mm and are supplied with their Electronic Driver. Larger diameters, as well as specific electrode patterns, are available upon request.
Contact Details: CILAS, 8 avenue Buffon, BP6310, 45063 Orleans Cedex 2 - France
www.cilas.com; info@cilas.com; Tel: +33 (0) 2 38 64 15 55

Ibsen Photonics
Visit us at Booth #743

Pulse Compression Gratings 120 mm long As femtosecond laser systems advance to ever-increasing energy levels, demands on the energy handling properties of pulse compression gratings increase. Ibsen manufactures 100% fused silica, transmission, Pulse Compression Gratings that offer unbeatable energy handling capacity, combined with high efficiency, low wavefront distortion performance. Now, production advances allow them to supply pulse compression gratings up to 120 mm in length. Come visit us at booth #743 to tell us about your requirements.
Contact Details: Ibsen Photonics, Piottermarken 15-21, DK-3350 Farum, Denmark
www.ibsen Photonics.com; inquiry@ibsen.dk; Tel: +45 44 34 70 00; Fax: +45 44 34 70 01

ALPHANOVO
ALPHANOVO's Cool & Control Modules drive laser diodes to new heights
With this new Cool & Control (CC) diode driver module from ALPHANOVO, single-mode and multimode diodes can now be reliably and securely driven with compact devices. The single-mode CC Module (CC-45) drivers and coax external standard laser diode. Its high pulse are generated internally or on-demand from a TTL signal. The multimode CC Module (CC-45) drives and coax external single or multiple elements laser diodes up to 80W.
Contact Details: Ludovic LESCIÈUX, ALPHANOVO Rue François Mitterrand, 33400 Talence, France
www.alphanov.com; ludovic.lescieux@alphanov.com; Tel: +33 (0) 5 43 54 52 00

PI (Physik Instrumente) LP
Visit us at Booth #403/4001

Fiber Optic Alignment Engines: 3 & 6 Axis PI’s leading-edge optical alignment engines. For rapid XYZ alignment, the compact F-113 CyberAligner fiber system is the gold standard when it comes to speed and versatility. It combines a pozo scanner (100µm, nonresonant, millisecond response) for quick device characterization and precise tracking with motorized long-range positioning stages. Hexapod based, 6-axis alignment engines are available for complex fiber optic components. The H-206, for example, is a unique parallel kinematics system including a specialized controller running a variety of user-selectable alignment routines. Get the whitepaper at www.pi-usa.us/products/PhotonicsAlignment_Solutions.
Contact Details: PI (Physik Instrumente) LP; USA: 16 Albright Street, Auburn, MA
www.pi-usa.us; info@pi-usa.us; Tel: +1 508 832 2456; Fax: +1 508 832 0506

AdlOptica GmbH
Visit us at Booth #6028

Focal-nShaper 9_532q for square flattop laser spots New Focal-nShaper 9_532q transforms transform and Gaussian 532 nm laser radiation to square shaped flat top focused spot of several microns or tens of microns size with nearly 100% efficiency. Versions for near-IR, visible, UV and CO2 lasers are available as well.
Increased quality and productivity of material processing, compactness, easy adjustability and simplicity of integration in already existing equipment; capability to work with scanning heads and -f-theta lenses make the Focal-nShaper an indispensable tool in various micromachining applications.
Contact Details: AdlOptica GmbH, Rudower Chaussee 29, 12489 Berlin, Germany
www.adloptica.com; www.pulsarbeam.com; info@adloptica.com; Tel: +49 (30) 56 59 08 80

Ibsen Photonics
Visit us at Booth #743

MÖLLER-WEDEL OPTICAL GmbH
Visit us at Booth #233

FREEDOM UV-NIR 190-1100 nm
This new spectrometer for integrators of analytical instruments offers high efficiency across the complete 190 – 1100 nm range, ultra-compact size (50 x 50 x 15 mm), robust and thermal performance, and flexibility in choice of detector and electronics. It is ideal for process control in out of the lab environments as well as handheld and portable instrument requirements. The high broadband efficiency is obtained with a new innovative transmission grating from Ibsen. Contrary to typical blaze gratings, this new grating provides nearly constant diffraction efficiency over the 190 – 1100 nm range for both polariations.
Contact Details: Ibsen Photonics, Piottermarken 15-21, DK-3350 Farum, Denmark
www.ibsen Photonics.com; inquiry@ibsen.dk; Tel: +45 44 34 70 00; Fax: +45 44 34 70 01

DIAS Diodenlaser GmbH
Visit us at Booth #239

Blue Fiber-Coupled, Multi-Single Emitter Module DIAS displays true multi-single emitter based, fiber-coupled module, nominated as a finalist for the 2014 Prism Awards for Photonics Innovation. This module is capable of delivering high output power and brightness in the 400nm spectral range and, due to its scalable approach, allows for powers from 10W to 100W with 10W and 25W currently released as a product.
Contact Details: DIAS Diodenlaser GmbH, Galileo-Galilei-Straße 10, 53119 Manno-Hochscheidt, Germany
www.dias.com; sales@diast.com; Tel: +49 (0) 6131-9226-0; Fax: +49 (0) 6131-9226-257

DRS Technologies, Inc.
Visit us at Booth #2417

ADVANCED THERMAL IMAGERS FROM DRS TECHNOLOGIES DRS Technologies provides high-performance thermal camera modules and detectors with flexible configurations to meet a broad range of application requirements. Leveraging decades of infrared detector development, DRI’s Tamara® (SWIR) and Zephyr® (MWIR) lines of advanced thermoelectric imagers provide the ideal balance of size, weight, power and performance.
Contact Details: DRS Technologies, Inc., Commercial Infrared Systems, 180 N. Babcock St., Melbourne, FL 32951
www.drsinfrared.com; sales@dris.com; Tel: 1 (855) 230 2372

Diamond SA
Visit us at Booth #4240

DiaLink F.O. Connector for OCT applications DRS’s revolutionary Fiber Optic DiaLink connector is a small coupling device based on a 2mm ferrule. Thanks to its very small diameter and a balanced design, this connector is an ideal solution for applications requiring high speed rotation, (e.g. medical OCT) or any other application where footprints is critical. The push-pull design allows easy mating and demating while both fiber end faces remain protected to minimize damage and to protect against contamination. The DiaLink is also an excellent alternative to fusion and mechanical splices. The DiLink is available for all FMM and SMF fibers, and for cables up to 2.1mm OD (Customized solutions upon request).
Contact Details: Diamond SA; Via dei Pantani, 5 CH-6466 Locarno, Switzerland
www.diamond-co.com; Tel: +41 91 785 45 45; Fax: +41 91 785 45 00

Diamond SA
Visit us at Booth #1723

Contact Details: Pixeltech; www.pixelteq.com; info@pixelteq.com; Tel: 1 772 545 0741

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Iridian Spectral Technologies
Visit us at Booth #5504

Global leader in custom optical filter and coating solutions
Iridian is the global leader in custom optical filter and coating solutions, addressing needs in markets including telecom/OTN dual-band dispersion compensation filters, high-spectral purity, fluorescence microscopy, air/gas flow rate and quality, Barcode & labeling, solar control and anti-glare, food and beverage, and aerospace. Iridian customizes optical coatings to meet both technical and commercial requirements.

Contact Details:
Iridian Spectral Technologies, 2700 Swannate Cres., Ottawa, Ontario, Canada K1G 6R8
www.iridian.ca inquiries@iridian.ca Tel: +1 (613) 741 4513 Fax: +1 (613) 741 9986

Variopptic
Visit us at Booth #5419

Caspian C-399N-16
The Caspian C-399N-16 is an electronically focus controllable C-Mount lens, based on Varioptic's breakthrough liquid lens technology, which incorporates all necessary electronic components to drive the liquid lens. It just needs a DC power supply, and focus can be controlled through either an RS232, I2C, Analog or SPI input. With a 16 mm effective focal length and 2/3” sensor compatibility, it is specifically designed for machine vision applications, enabling fast focusing from 10 cm to infinity with no moving parts.

Contact Details:
- Variopptic - a BU of Parrot SA, 24B rue Jean Baldassini, 69007 Lyon, France
- www.varioptic.com sales.varioptic@parrot.com Tel: +33 (0) 4 37 65 35 31

Telops Inc.
Visit us at Booth #5602

TS-IR A Rugged and Versatile Scientific Infrared Camera
The TS-IR is a high performance thermal infrared camera. Its outstanding temperature accuracy and sensitivity enables it to distinguish temperature variations as subtle as ±0.2°C. The advanced infrared Camera features:
- Rugged IP67 sealed enclosure
- Multiparametric capabilities
- High speed, high internal memory
- An optional thermography package including Wi-Fi data transfer, internal storage and more, enhances its ease of use.

Contact Details:
- Telops Inc., 100-2600 ave. St-Jean Baptiste, Québec, QC G2E 6J5
- www.telops.com contact@telops.com Tel: +1 (418) 864 7868 Fax: +1 (418) 864 7843

Voltage Multipliers Inc.
Visit us at Booth #5406

Optocouplers Just Got Better!
The DC100/150 series of high voltage optocouplers feature high gain, long-term gain stability, and high isolation voltage. The optocouplers will run at their maximum Vrms of 10kV and 15kV or lower. Optocouplers are useful in preventing ground loops, especially in noisy environments where instruments are used. Because the output leakage current is linear over the operating range, they can be used as part of a control circuit or feedback loop. Other applications include high voltage switches, or as a high voltage op amp.

Contact Details:
- Voltage Multipliers Inc., Karen Spano, Sales Administration Manager
- www.voltagemultipliers.com kspano@voltagemultipliers.com Tel: +1 (559) 651 1402

Xenics Infrared Solutions
Visit us at Booth #424

Bobcat-640: Smallest GigE Vision/CameraLink SWIR Camera with Low Noise
The advanced Bobcat-640 meets high sensitivity in the SWIR range for specialized research & development and high temperature process control. You get excellent image quality with on-board image processing and Therma Electric (TE) stabilization for low dark current and optimized noise performance. We offer full flexibility in terms of Xenics 10kD, multiple interfaces, Power over Ethernet and variable integration times.

Contact Details:
- Xenics NV, Ambachtenlaan 44, BE-3001 Leuven, Belgium
- www.xenics.com sales@xenics.com Tel: +32 16 38 99 00

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Piezo? Servo? Stepper?
ZERO-COMPROMISE MOTION CONTROL

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