

2013 Photonics West

Welcome to the optics.org Product Focus which we have published specifically for Photonics West 2013 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.

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.

ImageMaster® Compact OptiCentric® MAX UP **Mirror Collimators** The modular and cost-effective Fully aligned target projectors Designed to measure and assemble MTF Test Station for use in prototype extremely large and heavy lenses, for testing and adjusting optical systems in IR, VIS and UV and small serial production for Microlithography Visit us at Booth #1608 Wells RESEARCH **TRIOPTICS Davidson Optronics** A TRIOPTICS COMPANY www.trioptics.com

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ID Quantique SA

Ibsen Photonics

id220: Free-running NIR Photon Counter **NEW: also available with MMF optical** input!

The id220-FR is a major breakthrough for single photon detection in free-running mode at telecom wavelengths.

The TEC-cooled InGaAs/InP avalanche photodiode has been specially designed for achieving low dark count rate.

The singlemode or multimode fiber coupled module can operate at detection probability up to 20% and with an adjustable deadtime; both parameters are adjustable via the USB interface

The timing resolution is as low as 250ps at 20% efficiency.

Applications are: Life sciences, Singlet Oxygen, Quantum optic, Spectroscopy, Fluorescence Lifetime and more.



Visit us at Booth No. 817

Contact Details

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Visit us at Booth No. 942

New ultra compact OEM spectrometer

Our FREEDOM VIS 360-830 spectrometers combine compactness with high performance and are the ideal OEM solution for portable systems where performance cannot be sacrificed.

We're also displaying our ROCK NIR 900-1700 spectrometers which offer typically 4x higher throughput than conventional spectrographs, due to a low f-number and highly efficient transmission grating.

Our spectrometers are perfect for analytical instrument integrators because of the flexibility in choice of detector and electronics, as well as a robust and thermally stable operation.



Contact Details

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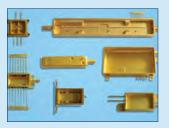
www.ibsenphotonics.com inquiry@ibsen.dk Tel: +45 44 34 70 00 Fax: +45 44 34 70 01

Optispac, Inc

Customized hermetic packages based on glass-metal seal and ceramic-metal seal hermetic

OptiSpac provides customized hermetic packages based on glass-metal seal and ceramic-metal seal hermetic. Diverse packages made of Kovar, Stainless Steel and other materials are available in different shapes as butterflies, rectangle, headers and etc. Our spectrum reaches out to Fiber-optical, Telecommunication, Microwave, Integrated Circuit and Hybrid Circuit.

We fulfilled ISO9001-2000 to manage everything in protection, traceability, and correction. We can control leakage less than 10 -8 atm* cm3/s, and enable some packages running through 48 hours salt spray test.



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KTP Pockels cells for Q-switching and pulse picking applications

New PCK series KTP Pockels developed at EKSMA OPTICS are based on specially grown high resistivity KTP crystals. KTP crystals have better optical homogeneity and higher damage threshold comparing to RTP crystals. The outstanding feature is possibility to operate KTP Pockels cells at high duty cycles.

- More than twice smaller HV requirement comparing to double BBO Pockels cells
- Operates at high duty cycles

EKSMA OPTICS

- Very low piezo-electric resonances
- Standard apertures from 3x3 up to 8x8 mm

Visit us at Booth No. 1039



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MÖLLER-WEDEL OPTICAL GmbH

ELCOMAT

The ELCOMAT direct family is mainly intended for use in optical workshops. It is specifically designed for the following measurement tasks:

- Measurement of small angles.
- Ultra precision angular adjustment and calibration.
- Automation in assembly.
- Wedge and prism measurement.
- Control of angular position.

The main features are:

- Quick and easy measurement of angles with high accuracy.
- Multiple autocollimation image evaluation.
- Computer-based evaluation.
- Connection to computer via USB 2.0 port.
- Easy service and handling.
- Easily embeddable into automated processes.
- Accuracy up to 0.3 arcsec

Visit us at Booth No. 842



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Visit us at Booth No. 5530

JGM Associates, Inc.

Laser Diode Array Drivers

JGM Associates, Inc. (JGMA) exclusively manufactures and sells the Model 928 and Model 830 laser diode drivers. These are the same drivers developed by Spectra Diode Labs (SDL) for operating high-power 1D and large 2D laser diode arrays, and that have a long history of proven reliability. In October 2012, JGMA acquired exclusive rights to manufacture the Model 928 and 830 from Martek Power Laser Drive who acquired rights from SDL.

The Model 928 quasi-CW (QCW) diode driver provides peak current levels to 150A and can drive as many as 50 diode bars in electrical series The Model 830 CW / QCW driver provides cw drive current to 50A and compliance voltage to 6 VDC. The Model 928 and 830 both provide drive current waveforms with fast rise/fall times (10 microseconds).

JGMA is offering a \$1,000 (13%) Photonics West Show discount on new Model 928 and Model 830 drivers ordered by Feb 15, 2013. Additional discounts are available for orders of two or more units. For example, if a Model 928 and Model 830 are ordered at the same time, the Model 830 is offered at about half price. We have 928 and 830 units in stock and ready for immediate delivery. For more information and product data sheets, please visit: http://jgma-inc.com/24834.html



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Fax: +1 781 221 7154

ALPHANOV Visit us at Booth No. 1131

Pulse-on-Demand Module Picosecond

ALPhANOV is launching the PDM Pico, a new comer in its Pulse-on-Demand Module (PDM) product family

The proven PDM Series are fiber laser diode modules that generate pulses on demand from an external trigger signal. Pulses can be generated from single-pulse to burst-mode

to CW, with repetition rates up to 250 MHz and excellent beam quality ($M^2 < 1.2$).

The PDM Pico goes a step further by delivering pulses with durations down to 150 ps with high stability and extremely low jitter (<8 ps).



Ludovic LESCIEUX ALPhANOV

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Diamond SA Visit us at Booth No. 4240

DiaLink-Saver Fiber optic connection

DIAMOND's revolutionary Fiber Optic DiaLink-Saver is a small coupling device based on 1,25mm ferrule, allowing easy mating and de-mating without tools or need for skilled

When disconnected, both fiber end-faces remain protected in order to be re-mated without cleaning.

Thanks to its Low-profile and balanced design, this system is an ideal solution for high speed rotation devices (typical for medical OCT applications) as well as a high quality link protection at vulnerable break points. It is also a valid alternative to replace splices.

The DiaLink-Saver is available for all MM and SM fibers, and for cables with 2.7-3.0mm OD. (Customized solutions upon request.)



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Iridian Spectral Technologies

Webstore for online purchase of standard filters

Iridian Spectral Technologies has introduced a new Webstore for online purchase of standard filters! You can now browse and purchase standard fluorescence filter sets at the industry's lowest prices. Soon to be available online -Iridian's standard Raman filters, including new wavelengths (1064 and 405 nm) and offerings (dichroic mirrors).

Recently Iridian has developed several exciting new optical filter capabilities including the lowest cut-off "Nano-edge" Raman filters, multi-zone patterned filters, and highly durable MWIR bandpass filters.

Come by the booth to learn more!



Visit us at Booth No. 306

Contact Details

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Diverse Optics Inc.

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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, diffractives, Fresnels, prisms, light-pipes, cylinders, lens arrays, collimators, combiners, toroids, CPC's, TIR's, micro-optics, mirrors, parabolics, off-axis, ellipticals, cylinders, and more!

Whether it's diamond turned prototypes or thousands of molded optics, we'll show you how polymer optics are perfected.



Visit us at Booth No. 2406

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Ms. Letty De La Cruz, Sales Engineer Diverse Optics Inc., 10310 Regis Court, Rancho Cucamonga, CA 91730

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MÖLLER-WEDEL OPTICAL GmbH

GONIOMAT M

The GONIOMAT M is a semiautomatic goniometer with electronic image evaluation that is essential for measurement and testing of angles of optical components, such as prisms, polygons and wedges. Furthermore it can be used for measuring and testing of angle gauges.

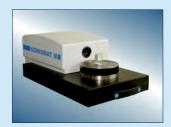
Advantages of the GONIOMAT M series

- Short measurement times
- Elimination of the subjective error by electronic image evaluation
- Logging of measurement results
- Easy handling
- Portable due to the compact design

Two levels of accuracy:

- GONIOMAT M5 class: 1.5 arcsec
- GONIOMAT M10 class: 2.5 arcsec

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DRS Technologies, Inc.

More Pixels. More Features. More Contrast. More Tamarisk®.

DRS Technologies expands the popular Tamarisk® line, introducing the high-resolution, feature-rich Tamarisk®640.

With a camera core weighing less than 60 g, the Tamarisk®640 offers remarkable performance, generating large, detailed analog and digital thermal images with a resolution of 640 x 480 pixels from its 17 μm focal plane

Backed by a two-year warranty, the Tamarisk®640 was designed for easy integration into security and analytics products, medical devices, unmanned sensors and handheld devices



Visit us at Booth No. 5427

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Laser-export Co. Ltd.

New TECHNOLOGY-series Q-switched lasers for OEM

Laser-compact group introduces a new series of unique actively g-switched DPSS lasers (brand name -TECHNOLOGY) which is intended to be used in industrial

Due to combination of high pulse energy (up to 1 mJ) and peak power, ultra-compact footprint and conductive cooled laser head, superior pulse-to-pulse stability and beam quality, low power consumption and maintenancefree operation, TECH-series lasers meet OEM requirements and are ideal sources for marking and micromachining of different materials (including transparent). 263, 351, 527 or 1053 nm wavelengths are available.

Visit us at BiOS Booth No. 8934 Visit us at Photonics West Booth No. 934



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Labsphere, Inc.

Labsphere now offers on-site calibration services for all brands of **Uniform Source Systems!**

SERVICE RECOMMENDED IF:

- System has operated for more than 50 hours
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Contact Details

Customer Service Labsphere, Inc., 231 Shaker Street North Sutton, NH US 03260

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GPD Optoelectronics Corp.

Two-color InGaAs over InGaAs Photodetector for Infrared Thermometry

GPD Optoelectronics Corp. announces a 2 mm InGaAs "over" a 2 mm InGaAs pin photodiode sensor for pyrometry.

The bottom photodiode's spectral response (1.7 to 2.6 um cutoff wavelength) can be customized to your temperature requirements.

They are manufactured in the US.

Visit us at Photonics West 2013, Booth 206, or contact the sales office.



Visit us at Booth No. 206

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PI (Physik Instrumente) LP

Piezo Positioners, Micro & Nano-**Positioning Systems** from PI and PI miCos

Pl and Pl miCos provide the broadest and deepest range of precision motion technologies in the world, from 1 to 6 axis systems, from micro to nano precision.

Talk to our engineers at Photonics West, booth #4821 ጷ (North Hall).

We have the experience to understand your application and will match it to the appropriate motion technology.

\mathbf{PI}

Visit us at Booth No's. 4821, 4919



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DILAS Diode Laser, Inc.

DILAS' fiber-coupled tailored bar

DILAS' fiber-coupled tailored bar (T-Bar) modules are now capable of delivering up to 100W from a 200 μ m fiber at 793nm.

The T-Bar was developed so that an automated active optics alignment can be utilized for efficient fiber coupling into a 200µm fiber.

The device is a monolithic multi-emitter source which takes advantage of handling multiple emitters during each individual manufacturing step to lower complexity and enhance reproducibility of the beam quality and hence the fiber coupling.



Visit us at Booth No. 4837

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Varioptic

Arctic 39N0 - 3.9mm clear aperture variable focus lens

Varioptic, the liquid lens company, announces a 3.9mm clear aperture variable focus lens.

Designed for imaging and laser products requiring a large aperture, Arctic 39N0 features the same performance that has built the success of the Arctic series: excellent optical quality, large focus range, unmatched resistance to life cycles and shocks, ultra-fast response time.

Arctic 39N0 is the ideal choice for demanding applications such as machine vision, medical imaging, optical equipment and biometric devices.

Come and see this new lens on Photonics West 2013 – booth #5402.



Visit us at Booth No. 5402

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Xenics Infrared Solutions

Smallest SWIR line-scan cameras

Xenics' uncooled Lynx SWIR cameras perfectly match the absorption spectra of low level photon emissions and provide increased subsurface penetration depth images.

The Lynx cameras are a flexible solution with standard GigE Vision, Power over Ethernet or CameraLink interface.

Furthermore you can change integration times from $1\mu s$ to several minutes. You will reach optimal image quality choosing from various configurations and multiple gain settings.

The cameras are offered in multiple line resolutions: 512, 1024 or unique 2048 which substitutes for costly multiple camera solutions.

Visit us at Booth No. 926



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Voltage Multipliers Inc.

15kV Opto-coupler - High Voltage, High Gain, High Stability

VMI's 15kV OC150HG opto-coupler is specially designed for applications requiring stable long-term gain and high isolation voltage.

Electrical specs include -

- 15kVrwm
- 1W
- DC Current Transfer Ration 0.2% min.
- Compact design

The OC150HG is useful in circuits that need to be isolated, remotely controlled, or monitored. The OC150HG is axialleaded and epoxy molded.

VMI designs and manufactures high voltage diodes, optodiodes, opto-couplers, multipliers, power supplies, rectifiers, and rectifier assemblies.

VMI is ISO9001:2008 certified.

Visit us at Booth No. 4933



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Photonics West Booth 4821 & 4919

- People to understand your application
- __ Broadest range of motion technologies
- __ Matching your application to the right technology

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