

ProductNews

Introducing the Lumen 1600-LED Universal Fluorescence Illumination System



With its 16 selectable LED wavelengths, the Lumen 1600-LED is compatible with all simple and multiband filter sets. The Lumen 1600-LED has a “white light” mode with simple on/off and intensity buttons. Fitting directly to most microscopes, the system enables for rapid switching between LED wavelengths to allow for capture of high-speed events. The Lumen 1600-LED is controlled via a manual keypad controller, TTL, USB as well as analog input for dynamic intensity control.

Prior Scientific, Inc.
www.prior.com

EXpressLO LLC Releases New Specimen Preparation Solution



EXpressLO LLC announced the Aspirato™ lift-out module for the EXpressLO™ *ex situ* lift-out station. The Aspirato module speeds processing of FIB specimens by improving lift-out speed and specimen placement, allowing users to maximize the advantages of the EXpressLO grids and lift-out method. More control over specimen positioning to our grids enables users to quickly place the area of interest in the optimal position for either FIB post-processing or for S/TEM imaging.

EXpressLO LLC
www.EXpressLO.com

Motic's New Tablet Cameras Convert Conventional Microscopes into Dynamic Imaging and Measurement Stations



With all of the iPads and tablets around, Motic decided to put one on a tilt-and-swivel C-mount so that it would fit directly onto an optical microscope, magically converting it into a dynamic imaging station that will preview, acquire, store, measure, and communicate microscope images. Capture high-quality images and HD videos with just one click. Measure and edit images with the touch of a finger.

Motic America
www.motic.com/Am_MoticamTablet

WITec Introduces apyrion—The Next Generation of Automated Raman Imaging Systems



The apyrion automated Raman microscope system includes laser wavelength selection with subsequent adjustment of associated spectrometer and microscope components to ensure optimized system performance. The absolute laser power determination and regulation in 0.1 milliwatt steps preserves delicate samples and guarantees the reproducibility of measurement conditions. The UHTS 600, a new 600 mm focal length spectrometer designed specifically for automated Raman imaging, enables challenging experiments at even very low-light intensities.

WITec GmbH
www.witec.de/products/raman/apyrion-automated-raman-imaging

The Latest Products from Olympus



The BXiS upright metallurgical microscope offers flexibly integrated digital imaging solutions that fit the widest variety of applications. Stream image analysis software provides scalable and accurate operation from basic image capture to image processing, report generation, and data management. The LEXT OLS4100 laser confocal microscope system is designed to deliver nanometer-level imaging, accurate 3D measurement, and outstanding surface roughness analysis. The OLS4100 features new auto brightness and high-speed stitching modes.

Olympus Corporation
www.olympus-ims.com

BioTools Unveils Revolutionary Family of Portable Raman Microscopes



The Mobile μ Raman is for particles, liquids, contaminants, and fibers, and the μ -BioRaman is for protein analysis. Each combines the imaging strength of optical microscopy with the insight of Raman spectroscopy. Moving to a portable mode has enabled shorter, more efficient light paths, significant drops in laser power that are gentler on the sample, and faster scanning. When coupled with surface-enhanced Raman scatter substrates or capillaries, these small powerhouses can collect a spectrum in 10 seconds.

BioTools
www.biotoools.com

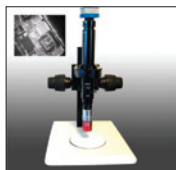
Leica Microsystems Launches FRAP Device for Widefield Microscopy



The Leica Widefield Fluorescence Recovery After Photobleaching (WF FRAP) device, for the investigation of cellular dynamics, provides users the flexibility to define their bleaching area using masks of various sizes and shapes. An addition to the inverted research microscope Leica DMI8, the Leica WF FRAP module includes a built-in 1.4-watt laser (450 nm) and is controlled via the imaging and analysis software Leica Application Suite X (LAS X).

Leica Microsystems
www.leica-microsystems.com

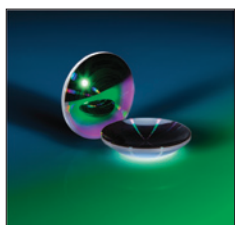
Pembroke Instruments Introduces SWIR Microscopy with Ultra-High Dynamic Range



The MicroSWIR-1000 microscopy platform enables high-performance magnified imaging between 900–1,700 nanometers. The SWIR microscope can be configured to the customer's exact requirements for magnification range, zoom, control, field of view, and working distance. Total magnification approaching 1000 \times is possible with a zoom range from 0.58 \times to 6.5 \times . The combination of ultra-high dynamic range and state-of-the-art SWIR optical design will provide unprecedented image quality and resolution for inspection and failure analysis applications.

Pembroke Instruments, LLC
www.pembrokeinstruments.com

TECHSPEC® Silicon Aspheric Lenses



Edmund Optics® introduced its new TECHSPEC® Silicon Aspheric Lenses that offer a high-performance, lightweight solution for midwave infrared applications and provide an excellent alternative for costly ZnSe lenses and brittle Germanium lenses. TECHSPEC Silicon Aspheric Lenses exhibit the mechanical and thermal properties needed to withstand harsh

environments, which include temperature and pressure fluctuations. The lenses are manufactured using an optical-grade silicon substrate, which is a low-density material, making them ideal for weight-sensitive IR systems.

Edmund Optics
www.edmundoptics.com

Leica Microsystems Launches Leica DFC7000 T Multi-Purpose Camera for Brightfield and Fluorescence Microscopy



Leica Microsystems launches the digital CCD color camera Leica DFC7000 T, which has been developed for both fluorescence and brightfield applications. The camera has a highly sensitive quad-tab sensor and is cooled. Users can acquire brightfield images thanks to the high camera resolution and distinctive color fidelity. At the same time, the camera's high signal-to-noise ratio

and sensitivity allow for detection of fluorescence signals delivering crisp images.

Leica Microsystems GmbH
www.leica-microsystems.com

Miniature Sensor Heads "xss" for Multi-Axis Measurements in Restricted Space Conditions



attocube's award-winning FPS3010—the ultra-high sensitivity, high-bandwidth interferometric displacement sensor—is now available with new sensor heads. With a diameter of only 1.2 millimeters, the ultra-compact "xss" heads can now perform measurements in extremely

limited-space-condition applications. Several sensor heads can easily be integrated even in the tiniest areas. The fiber-based design allows for flexible alignment, thus making multi-axis measurements an easy task.

attocube systems AG
www.attocube.com

Deep-Cooled Scientific Spectroscopy Camera



HORIBA Scientific's new Synapse EM is a deep-cooled EMCCD Scientific camera for low-light and ultra-fast spectroscopy experiments. With a sensor format of 1600 × 200 or 1600 × 400 and a pixel size of 16 microns, the Synapse EM is perfect for high spectral resolution measurements. The camera

comes with a standard dual readout mode that allows the users to switch automatically between EMCCD mode for low light measurements and conventional CCD mode for standard spectroscopy.

HORIBA Instruments Incorporated
www.horiba.com/scientific

Allied Vision Expands Its Entry-Level Camera Family, Mako, with Five New Models



The Mako G-030 targets industrial inspection applications with a high throughput. It features the new CMV300 CMOS sensor from CMOSIS. Allied Vision integrates two new Sony CCD sensors with a very high sensitivity and outstanding dynamic range into the Mako series. The Mako

G-050 has 0.5 megapixels of resolution, and the Mako G-095 has 0.9 megapixels/720p HD of resolution. There are two additional models with CMOS sensors: Mako G-131 and Mako G-192 with 1.3 and 1.9 megapixels respectively.

Allied Vision Technologies GmbH
www.alliedvisiontec.com

JAI's 20-Megapixel Spark CMOS Camera Now Has CoaXPress and USB3 Vision Interface Options



JAI added two new interface options to its 20-megapixel CMOS camera family. The Spark Series SP-20000 cameras have previously only been available with a power-over-Mini-Camera-Link interface.

The four new models—two monochrome and two color—give users a choice of a dual-channel CoaXPress interface at 30 frames per second, or a single USB3 Vision interface running at 16 frames per second.

JAI Inc.
www.jai.com

ZEISS Introduces Compact Confocal Microscope ZEISS LSM 800 with Airyscan



ZEISS introduced a new compact confocal laser scanning microscope for high-end confocal imaging, ZEISS LSM 800. Tailored to the needs of a broad range of applications in individual research environments, the system complements the recently introduced ZEISS LSM 8 family. With highly sensitive GaAsP detector

technology and fast linear scanning, ZEISS LSM 800 provides high image quality and offers enhanced productivity and throughput, as well as greater flexibility in live cell imaging.

Carl Zeiss Microscopy
www.zeiss.com

Bruker Introduces BioScope Resolve High-Resolution BioAFM System



BioScope Resolve™ is a biological AFM with high-resolution imaging and cell mechanics capabilities for use with an inverted optical microscope (IOM). The system incorporates Bruker's proprietary PeakForce Tapping® technology to enable researchers to achieve both the highest-resolution imaging and piconewton-level force measurements on biological samples. BioScope Resolve enables imaging and mechanical property mapping of the biological detail of cells, tissues, and biomolecular structures never previously observed with a bioAFM on an IOM.

Bruker Corporation
www.bruker.com