

ProductNews

Product News Basler Dart Camera Modules with BCON Interface and Development Kit for Embedded Vision Applications



Basler has now moved its dart board level camera modules with BCON for LVDS interface into series production. The Basler dart camera series stands out for its strongly cost-optimized design, resolutions of up to 5 megapixels, and tremendous flexibility thanks to various mount options (S-mount, CS-mount, and bare board). Eighteen dart camera models with the BCON for LDVS interface and a matching development kit are entering series production.

Basler AG
www.baslerweb.com/embedded

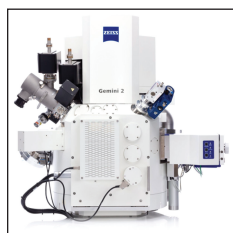
OPTRONICS® Release of OcularCINEMA™ 4K



The OcularCINEMA™ 4K 3 CMOS Ultra HD color microscope camera package, with remote head c-mount camera system for research and industrial microscope visualization applications, delivers a true progressive scan real-time view of the ocular viewing experience to the largest displays and projectors with 4× the resolution of standard HD video. The package enables effortless connection to a compound microscope with an included adapter compatible for most OLYMPUS®, LEICA®, and NIKON® microscopes.

OPTRONICS
www.optronics.com

ZEISS Crossbeam 550 FIB-SEM

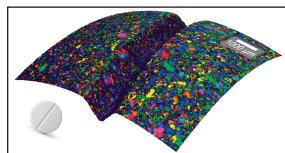


ZEISS Crossbeam 550 provides exceptional image quality in 2D and 3D. The new Tandem decel mode enables enhanced resolution together with a maximization of image contrast at low landing energies. The pioneering Gemini II electron optics delivers optimum resolution at low voltage and high probe current simultaneously. The FIB column combines the highest available FIB current of 100 nA with the new

FastMill mode, allowing for highly precise and more efficient material processing and imaging in parallel.

Zeiss Microscopy
www.zeiss.com/microscopy

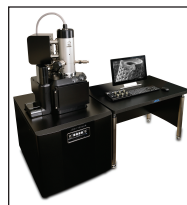
TrueSurface – the Original Topographic Raman Imaging System, Redefined



The combination of surface analysis and Raman spectral acquisition enables topographic Raman imaging on rough and uneven samples. With the TrueSurface option, Raman spectra are acquired from precisely along a surface, or at a set, user-defined distance from a surface. This makes the distribution of chemical components within the sample visible in three dimensions. Rough, inclined, or irregularly shaped samples can be investigated with the same ease as standard samples; sample preparation is therefore simplified.

WITec GmbH
www.witec.de/products/accessories/truesurface

JEOL InTouchScope SEM



The JSM-IT300HR has a large analytical chamber that accommodates multiple detectors such as: EDS, WDS, EBSD, CL, and more, creating a virtual nano-lab inside the SEM. The specimen stage is mounted inside the chamber, enabling users to secure large, heavy, and odd-shaped objects on the stage with clear positioning prior to evacuating the chamber. Low-vacuum capability is built in, allowing for imaging and analysis of all types of samples in their native state.

JEOL USA, Inc.
www.jeolusa.com

The Olympus CX43 and CX33 Microscopes



Ergonomic and easy to use, the new Olympus CX43 and CX33 microscopes help keep users comfortable during long periods of use, maximizing work efficiency. In high-throughput laboratory environments, user comfort is important for maintaining productivity. The CX43 and CX33 microscopes support a variety of observation methods, giving users the flexibility to switch to the most appropriate method for their application. The microscope's observation methods are also supported with a new LED light source that provides uniform illumination.

Olympus Corporation
www.olympus-lifescience.com for life science products and
www.olympus-ims.com for industrial products

New Field Emission Cryo-Electron Microscope JEM-Z200FSC



JEOL announces the latest member in its family of high-end transmission electron microscopes, the CryoARM. This highly automated TEM is designed for unattended operation and high-throughput imaging of cryo-EM specimens. The CryoARM is a dedicated cryo-TEM, based on the highly successful JEOL ARM (atomic resolution microscope) series, an ultrahigh performance, highly stable platform considered to be the "best-in-class" TEM. The development of the CryoARM was accomplished in collaboration with leading life science researchers.

JEOL USA, Inc.
www.jeolusa.com

Two New Go Series Cameras from JAI



The new GO-2400-USB is the third interface variant for the GO-2400 family, which features 2.35-megapixel resolution and the Sony Pregius™ IMX174 CMOS image sensor. With a high-performance USB3 Vision interface, the new GO-2400-USB models (monochrome and color) offer frame rates of up to 159 frames per second at full resolution. They join previous GO-2400 models, which featured GigE Vision and Power over Mini Camera Link interfaces. The cameras support standard C-mount lenses.

JAI Inc
www.jai.com

Andor Launches iXon Life for Fluorescence Microscopy



Andor announced the launch of the iXon Life Electron Multiplying CCD camera platform for fluorescence microscopy. Featuring single-photon-sensitive, back-illuminated EMCCD technology and overclocked to market leading frame rate performance, iXon Life is uniquely available in an accessible price bracket, normally associated with lower-cost back-illuminated sCMOS technology. Available in 1024 × 1024 and 512 × 512 sensor formats, back-illuminated to deliver the highest and broadest QE of any microscopy camera, and deep-cooled down to -80°C for minimal darkcurrent.

Andor Technology (Andor), an Oxford Instruments company
www.andor.com/ixon

Andor Technology (Andor), an Oxford Instruments company
www.andor.com/ixon

Thermo Scientific Explorer 4 Analyzer



The Thermo Scientific Explorer 4 Analyzer with MQA software offers improved throughput for analysis of non-metallic inclusions in steel. The platform is a fourth-generation scanning electron microscope/x-ray spectroscopy for industrial manufacturing. It is faster and easier to use than its predecessors yet still maintains its predecessors' industry-standard accuracy and reliability. Thermo

Scientific Explorer 4 Analyzer with MQA software provides metals quality analysis, such as the size, shape, number, and elemental composition of non-metallic inclusions in metals.

Thermo Fisher Scientific Inc.
www.fe.com/industrial-manufacturing/metals-quality

Leica Microsystems Launches High-Precision Scanning Stage for Stereo Microscopes and Macroscopes

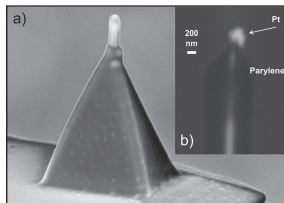


Leica Microsystems launched a high-precision scanning stage for stereo microscopes and macroscopes, the Leica LMT260 XY Scanning Stage. To ensure successful experiments, it offers a repeatability of 0.25 μm for samples weighing less than 0.5 kg, and of 1 μm for heavier loads of 1.5 kg. This repeatability is reached at a resolution of 5 nm. Such precision is especially interesting for users who perform time-lapse experiments

such as multi-well screenings.

Leica Microsystems, Inc.
www.leica-microsystems.com

AFM Probes for Scanning Electrochemical Microscopy

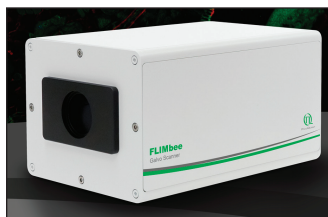


NaugaNeedles has a unique technology to selectively grow individual metallic Silver/Gallium (Ag_2Ga) nanoneedles at the end of standard atomic force microscope probes. The Ag_2Ga nanoneedles have superior electrical, mechanical, and chemical stability that are suitable for a variety of AFM

applications. NaugaNeedles is proud to be the first company to commercialize conductive AFM probes that can perform in liquid environments (e.g., AFM-SECM, CFM under liquid). This unique product is called Exposed End NeedleProbe (EENP-P).

NaugaNeedles LLC
www.nauganeedles.com

Fast-Scanning Add-On FLIMbee for PicoQuant's MicroTime 200 Platform



The galvo scanner add-on FLIMbee has been developed for PicoQuant's time-resolved microscopy platform MicroTime 200. FLIMbee provides an outstanding flexibility in scanning speed, ranging from very slow to fast, while maintaining the excellent spatial precision of the

MicroTime 200. The FLIMbee is designed to minimize vignetting of the image field and to ensure a constant focal volume over a wide scan range. The fast scanning option enables imaging of quickly occurring changes in samples.

PicoQuant GmbH
www.picoquant.com

Leica Microsystems Launches SP8 DIVE



With the launch of the all-new SP8 DIVE system, Leica Microsystems offers the world's first spectrally tunable solution for multi-color, multiphoton, deep-tissue imaging. DIVE stands for Deep In Vivo Explorer and enables researchers to capture up to four fluorophores simultaneously and an unlimited number of fluorophores sequentially. It is based on our all-new 4Tune detector technology combined with state-of-the-art HyD imaging chain. Together these technologies offer full spectral freedom enabling breakthroughs in multicolor deep-tissue imaging.

Leica Microsystems GmbH
www.leica-microsystems.com/dive

VHX-6000—New Digital Microscope



The VHX Series overcomes limitations of traditional optical microscopes by providing high-resolution, large depth-of-field imaging, and integrated 2D/3D measurement in a simple-to-operate system. The VHX-6000 is equipped with a CMOS camera that is capable of imaging at 50 frames per second. Lighting techniques include brightfield and darkfield,

transmitted, polarized, and differential interference observation. The new ZST lens has a magnification range of 20×–2000× and supports mixed lighting, which combines brightfield and darkfield.

Keyence Corporation of America
www.keyence.com

Princeton Instruments' SpectraPro® HRS-300 High-Resolution Imaging Spectrograph



Princeton Instruments introduced SpectraPro HRS-300, which is engineered to deliver both the outstanding spectral resolution and the astigmatism correction needed for advanced microspectroscopy and multichannel fiber applications. This 300 mm imaging spectrograph's optical performance is further optimized

via ResXtreme™, an exclusive new spectral deconvolution technology from Princeton Instruments that is provided with every SpectraPro HRS. ResXtreme can improve spectral resolution, peak intensities, and consistency across the 2D focal plane by as much as 60%.

Princeton Instruments
www.princetoninstruments.com