# Newsletter October 2010

All products are available through **ALRAD IMAGING or ALRAD ELECTRONICS** which are trading divisions of Alrad Instruments Ltd. If you would like more information on any of the items featured in this newsletter either telephone **01635 30345** or email **sales@alrad.co.uk**

## Laser pattern generators for image processing

Coherent's world-renowned Lasiris™ SNF laser transforms the familiar laser dot into a wide range of structured light patterns including single and multiple laser lines with uniformity down to ±15%. Straight laser lines are projected by allowing one dimension of light to fan out while maintaining tight control over the other, resulting in a uniform sheet-of-light.

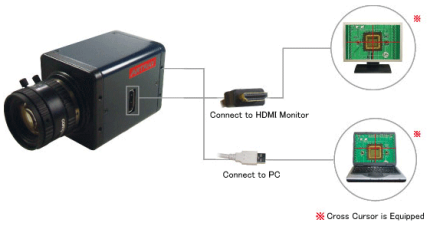
What distinguishes the SNF laser from conventional lasers (with cylindrical optics) is the evenness of the illumination pattern. Lasiris™ lasers incorporate a patented optical laser line generator that eliminates Gaussian distribution of the light, resulting in the most uniform laser lines on the market. The design provides superior quality light patterns while avoiding the intricacies of installation alignment and detector calibration.

## Join us at Photonex 2010

Photonex this year will be held on the 3rd and 4th November 2010 at the International Centre in Telford. Join us there and visit our stand E11 where we will have a number of exciting new products to show you. If you need more information on Photonex visit our web site and follow the Photonex exhibition link. We look forward to seeing you there.

## Dual output cameras make imaging easier

Whether it's industrial, scientific or medical imaging the dual output ARTCAM cameras offer a flexible solution for your imaging needs. With dual HDMI and USB2.0 outputs the ARTCAM-130MI-HDMI is a 1.3 Megapixel CMOS camera with 1280 x 1024 pixel sensor and a rolling shutter while the ARTCAM-150P4-HDMI is a 1.5 Megapixel CCD camera with 1392 x 1040 pixel sensor and a global shutter. Both cameras use progressive scan sensors and have a standard C mount lens fitting.




In many research, scientific or medical applications you want to view the image on high resolution monitor and not download the images to a computer. The ARTCAM-130MI-HDMI and ARTCAM-150P4-HDMI allow you to do this easily. In many of these applications and particularly in industrial imaging you will also want to download the images to a PC. Due to the dual output feature of these cameras this can easily be achieved using the USB2.0 output and no interface card will be needed in your PC so the cameras are ideal for use with any type of computer including laptops.

## Infrared temperature monitoring design solved quickly with new Evaluation kit for Dexter Sensor module.

The Dexter Temperature Sensor Module (TSM), (p/n: MD-0003) consists of the industry standard Dexter ST-60 with a special embedded signal conditioning ASIC inside theTO-5 can. Due to the low noise amplifier, 17-bit high resolution ADC and powerful DSP of the TSM very accurate non-contact temperature measurements can be achieved. Factory Calibrated object and ambient temperatures is available in RAM of TSM accessible by the industry standard serial SMBus protocol or via 10-bit PWM (Pulse Width Modulated) output of the device
the new evaluation kit, (p/n: MD-0004) is designed to support the infrared temperature sensor modules (TSM). The communication between PC and the evaluation board is accomplished via a USB interface.
The main purpose of the evaluation kit is to allow customers to configure the TSM for virtually any application quickly. Customers can quickly evaluate the TSM for temperature ranges, optics, etc. to find the best configuration to meet their application needs without the need to design any additional hardware. Once the best configuration is established, customers can easily configure the TSM for their own use.

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## Thermal Imaging cameras


ARTRAY is offering the very latest in thermal imaging camera design in its Models 320 (QVGA) and 640 (VGA) cameras. The cameras use an ultra cooled Microbolometer with a wavelength response of 8-14 microns. The output from the camera is streamed directly to the USB2.0 input on a computer so no interface card is required, which means the cameras can be used with laptop computers and make the whole package very easy to use. The camera operates at 30 frames per second with a 14 bit output. It has an inbuilt Peltier cooler allowing a choice of dynamic ranges. Low range is between -40°C - 150°C and high range is 0°C - 540°C. The 320 (QVGA) model is also available with an optional LAN (Ethernet output). Both cameras are available with a choice of Germanium lenses. Full software SDK is included and the cameras are compatible with Windows XP and Windows Vista operating systems. Applications include quality control, diagnostics, surveillance, building inspection, image processing and research and development.

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## New Sentech camera catalogue now available.


The new Sentech camera catalogue is now available and offers a host of different cameras designed for industrial, scientific and medical imaging and is one catalogue you cannot afford to be without if you are interested in digital or analogue cameras.

The new catalogue can be downloaded from our website and includes GigEVision, Cameralink, USB2.0 and analogue output cameras and modules.
**Make sure you download your copy now**

The new Sentech STC-GE/GEC camera series includes both colour and monochrome cameras. These cameras are digital GigE cameras and offered in two configurations: "Standard" and "Power Plus" – the latter incorporating Xilinx or Altera based User FPGA.
This series features VGA, XGA, SXGA, UXGA and QSXGA progressive scan sensors, thus offering resolutions from 648 x 494 to 2448 x 2050 and scan rates between 15 and 90fps depending on the resolution. Other features include full, 1/2 Partial, 1/4 Partial, Variable Partial Scanning and Binning, Internal / External sync system, 8/10/12bit Raw Data, GeniCam and GigE Vision protocol compatibility, Pulse Width Trigger / Edge Preset Trigger and communications over a 12 pin Hirose or Ethernet connector. The compact size and flexibility of these cameras make them suitable for a wide range of machine vision and industrial applications uses, with the ***Power Plus*** family particularly aimed at OEM applications.

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