
Newsletter June 2011

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It's here – the new generation of the highly successful mvBlueLYNX-X



The mvBlueLYNX-X is the next generation of the successful MATRIX VISION intelligent camera product line. The CPU core is based on the state-of-the-art ARM technology with up to 1 GHz target clock and image processing acceleration by DSP co-processor for parallel handling of multiple pixel and float data. The system is ideally suited for the classical areas of machine vision; the large processing power and high-end display and graphics capability make it perfect for many other application areas.

This new generation of smart cameras is smaller, faster, cheaper and available with a wider range of sensors than the previous models.

mvBlueCOUGAR-X: The next generation GigE Vision cameras combine the features X-tra small, low power and high performance

The latest mvBlueCOUGAR-X from Matrix Vision is one of the most compact bodied GigE Vision cameras on the market. It is keenly priced to offer machine vision system developers a unique opportunity to use a high performance intelligent camera in a small and economical package - making it ideal for any industrial application environment.

There is a choice of resolutions with sensors from VGA up to 5 MegaPixels. A range of CCD sensors are available offering high sensitivity and good colour rendition. Also offered is an inexpensive 1/2.5" format CMOS sensor which is ideal for applications where there is good lighting and the colour fidelity is not a prime concern (if at all) and the rolling shutter is not an issue.



The mvBlueFOX is a compact industrial CCD & CMOS camera solution for any PC with USB ports.



The mvBlueFOX is a compact CCD and CMOS camera range offering superior image quality which makes it suited for most industrial vision applications. It is an ideal solution for any PC with USB ports. The driver in combination with the FPGA represents a perfect team which reduces the PC load to a minimum during pre-processing like Bayer colour conversion. The standard Hi-Speed USB2.0 interface guarantees an easy integration without any additional interface board.

New lenses from Fujinon and KOWA.

	<p>DV3.4x3.8SA-SA1 3 Megapixel Focal length: 3.8 mm ~ 13 mm For 1/2" ~ 1/4" cameras Auto iris (DC) manual iris available: DV3.4x3.8SA-1</p>		<p>DV10x8SA-SA1 3 Megapixel Focal length: 8 mm ~ 80mm For 1/2" ~ 1/4" cameras Auto iris (DC) manual iris available: DV10x8SA-1</p>
	<p>HF35SR4A-SA1L IR corrected Focal length: 35 mm For 2/3" ~ 1/3" cameras Auto iris (DC) manual iris available: HF35SR4A-1</p>		<p>HF50SR4A-SA1L IR corrected Focal length: 50 mm For 2/3" ~ 1/3" cameras Auto iris (DC) manual iris available: HF50SR4A-1</p>
	<p>D60x16.7SR4DE-V21 Day & Night lens 2 Megapixel Focal length (1x): 16.7 mm ~ 1000 mm Focal length (2x): 33.4 mm ~ 2000 mm For 1/1.8" ~ 1/4" cameras Auto iris (DC) or remote Preset type</p>		<p>From KOWA – 10 MegaPixel lenses. This extraordinary lens series with resolution of 200lp/mm and extra low distortion will maximize performance of high-end inspection. Incorporating Kowa's broad band coating and floating mechanism design, the JC10M series will greatly reduce chromatic aberration from close distance to infinity and maintain a high transmission from visible to NIR.</p>

Super 16 MegaPixel camera from VDS Vosskuhler

With 4896 x 3264 pixels the CCD16000 offers very high resolution. The 12-bit camera output is 2 frames per second in full resolution mode, but when binned to 4896 x 1632 pixels 4 frames per second operation is possible. The camera uses a 35mm format (36x24mm) sensor and thus many full-frame F-mount lenses are available for use with the camera.

Owing to the progressive interline transfer CCD sensor, very short exposure times are possible down to 1/7000 sec at full resolution. The exposure time can be finely tuned in steps of 144 microseconds. Due to its asynchronous operation the exposure time starts 15 microseconds after the external trigger pulse. Therefore, the camera is particularly suitable for capturing fast moving objects. The choice of interfaces includes CameraLink, IEEE1394a and GigE.

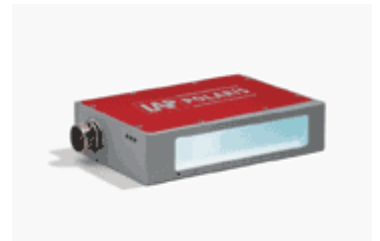


LAP measurement systems – non contact displacement measurement.

LAP laser sensors measure dimensions without touching the object's surface. Production processes can be monitored continuously, ensuring quality and reducing rejects. LAP measurement systems are flexible and easy to integrate, with very capable software. Having no contact with the object to be measured lets the user work with soft, sticky, hot or other sensitive surfaces. There will be no wear and tear at the sensor. Keeping the sensors' windows clean can be done by air purging.

All systems incorporate laser triangulation sensors. Measurements of displacement, thickness, width and height, etc can be made. Depending on the type of system purchased, measurement ranges from 0.2mm to 4000mm are possible and accuracies down to ±0.1 micron can be achieved.

Based on a Digital Signal Processor (DSP) the intelligent sensor controls the exposure of the CCD and the output power of the laser source. Because of this, LAP laser sensors measure extremely precisely and quickly, even if surface characteristics like colour or reflectivity are changing. Parameters such as measurement speed or filters are handled directly in the sensor's DSP.



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