3-CMOS Line Scan Camera Family Expanded

JAI announces the release of the LT-200CL, a new industrial grade color line scan camera based on JAI's advanced prism technology. Featuring a light beam splitter prism and three 2048-pixel, custom-designed CMOS sensors, the LT-200CL captures the red, green and blue spectral bands in 3 separate channels simultaneously through the same optical path and with co-site sampling accuracy.
The high color accuracy provided with the LT-200CL makes it ideal for demanding vision applications such as fruit and vegetable sorting, 2D/3D print inspection, wood inspection and surface inspection of flat panels and paint coatings, for example.

Further, JAI's prism-block technology enables users to avoid the complex alignment and encoding issues related to off-axis viewing, variations in conveyor speeds, surface undulations, or objects that roll or move as they pass through the camera's field of view.

The LT-200CL is capable of running at scan rates up to 30383 lines/second via an 80 MHz data clock and follows the recent launch of JAI's 3-CMOS color line scan camera, the LT-400CL, which features 3 x 4096 pixels and a 16180 lines/second scan rate. With the addition of the LT-200CL to the product program, JAI now offers multiple resolutions and speeds in this new family of color line scan cameras.

For flexible setting of scan rates and resolution the LT-200CL features various pixel readout modes like full readout, binning, sub-sampling and windowing readout. Using sub-sampling or windowing readout modes the camera is capable of running at scan rates up to 60766 lines/second at 1024 pixel resolution.

A number of built-in pre-processing functions are available including flat-field compensation, flat-shading compensation and color shading compensation. Gain

correction as well as the electronic shutter can be set individually for the red, blue and green channels providing even further flexibility in image optimization.

Other features include one-push automatic white balance, a noise reduction function and a test pattern generator that can be applied as a set-up and installation aid to check the performance of the camera.

The camera is equipped with a Camera Link interface providing 24-bit (3 x 8-bit) or 30-bit (3x10-bit) outputs.

To maximize the camera's ability to withstand the rigors of industrial environments, all LT-200CL cameras undergo extensive shock (50G) and vibration testing (3G) to secure reliable operation over very long operating periods. A ridged housing design provides maximum surface area for heat dissipation resulting in excellent temperature management and optimal image quality.

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