8-megapixel CCD cameras provide 3296 x 2472 resolution at 17 fps

Following a successful preview at the Stuttgart Vision Show in November, JAI has now officially launched two new 8-megapixel industrial grade CCD cameras offering a combination of high resolution, high fidelity, and high frame rates.

The AM-800CL (monochrome) and AB-800CL (color) cameras feature the KAI-08050 quad-tap sensor from Kodak, capable of providing full 3296 x 2472 resolution at 17 fps in monochrome or raw Bayer formats, respectively. A standard Camera Link digital interface supports 8-bit, 10-bit, or 12-bit output. The AB-800CL can also perform internal color interpolation, producing 24-bit RGB output at 8.5 fps.

With the introduction of these cameras, JAI adds strength to its position as a premier supplier of multi-megapixel industrial CCD cameras. The 8-megapixel models bring to more than 20 the total number of JAI cameras currently offered with resolutions between 2 megapixels and 16 megapixels, including single-tap, dual-tap, and now quad-tap models.

The AM-800CL and AB-800CL use the Kodak CCD's quad-tap architecture for rapid image acquisition, then combine the four taps into two for monochrome or Bayer readout, or a single output channel if in-camera interpolation is used. Built-in channel balancing capabilities are provided to ensure uniformity across the image.

The cameras feature user configurable AOI scanning (partial scanning), multiple binning modes (AM-800CL only), and a variety of acquisition modes, including continuous, single-frame, and multi-frame capture. Advanced image pre-processing features range from auto-gain, auto-shutter, and auto-white balancing, to pixel blemish compensation, flat-field compensation, and a 256-point look-up table for gamma customization.

Like JAI's other high resolution cameras, the new 8-megapixel models incorporate a list of industrial grade features to maximize performance in machine vision environments. These include precise sensor alignment, advanced thermal management, a built-in temperature sensor, and rugged construction with extensive shock and vibration testing performed.

The cameras can be ordered with either C-mount or F-mount lens mounts. Dimensions depend on the configuration. All models are 55 mm wide and 55 mm high. C-mount housings are 69 mm in length while F-mount models are 98 mm to accommodate the longer flange back distance of F-mount lenses.

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