

## Note d'Application Vision industrielle

### Gigabit Ethernet Cameras Control Motorized Lenses

During the Vision Show 2009, in Phoenix (AZ), hardware manufacturer Leutron Vision introduced its new camera interfaces featuring an integrated lens controller: PicSight-AS-RTF and PicSight-Smart-AS-RTF.

The integrated lens controller allows the **control of motorized zoom lenses** over three independent channels, typically **zoom, focus and aperture**.

Leutron has designed the interface to be **compatible with most lenses available on the market**. Requirements are as follow: C-mount or CS-mount, direct current motors and an input voltage up to 24V. The cameras use the standard mini Camera Link connector, also known as SDR-26, for the electrical connection to the lens. No additional connection to the host PC is required as **all the commands are handled by the camera**. This keeps hardware cost low, simplifies cabling and reduces the overall space of the camera system. The three channels, normally configured for zoom, focus and aperture can be set and read back. The repositioning accuracy depends on the lens but is generally about 1%. The camera API provides full control over the lens for any type of application.



Motorized lenses provide key functionality where the camera can't be reached or when adjustments must be done often. They are typically used in **security and surveillance applications**.

In case Pan and Tilt functionality is required, the PicSight-Smart-AS-RTF features an integrated serial interface, RS-232, to send the appropriate commands. Again, no extra connection to the host PC is necessary.

The PicSight camera family features twenty-eight different sensors from VGA to 5M pixels, color or monochrome, CCD or CMOS. PicSight offers a large choice of interfaces such as Gigabit Ethernet GigE-Vision compliant, Camera Link, USB 2.0 and Smart. Sensor and interface can be selected independently.

Building on more than 25 years of technology expertise and knowledge of the machine vision market, Leutron Vision, Pioneers in Image Acquisition, is a key supplier of machine vision Hardware for OEMs worldwide.