

16 Megapixel USB 2.0 Camera



Outline

Lumenera's Lw16059 series of industrial megapixel cameras are specifically designed for applications requiring large field of view, high dynamic range, and extremely high sensitivity. With 4872 x 3248 resolution, one of these cameras can be implemented in a system where several cameras were previously required. The high dynamic range allows for capture and reproduction of extremely subtle gray-scale variations, making it ideal for high-contrast conditions. Extremely high sensitivity makes it your best choice for applications with uncontrolled and poorly illuminated environments. The sensitivity improves dramatically when the camera is operated in binning mode.

The Lw16059's powerful on-board processing chip-set performs a wide variety of image processing operations that free valuable memory space in the PC host. 12-bit output, auto focus and auto iris are just other remarkable features that provide optimal image quality.

Uncompressed images as streaming video and still image capture are provided across a USB 2.0 digital interface. No framegrabber is required. Advanced camera control is available through a complete Software Developer's Kit (SDK), with sample code available to quickly integrate camera functions into OEM applications.

All Lumenera products are supported by an experienced team of software developers and application engineers. We understand your imaging needs and are here to help you with your integration and development.

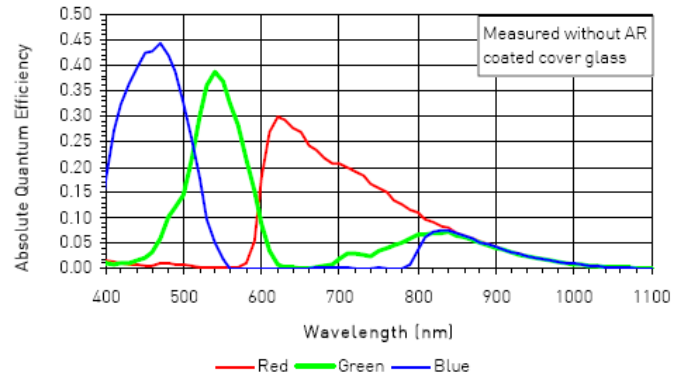
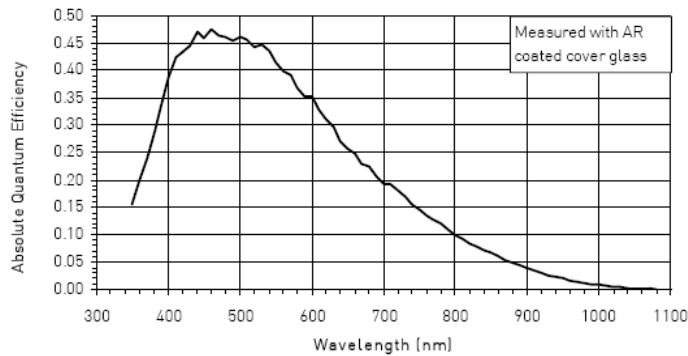
Performance Features

- ❑ 16 megapixel sensor, 4872 x 3248 resolution, with global shutter
- ❑ 2x2/4x4 color binning increases sensitivity and frame rate
- ❑ Large dynamic range
- ❑ Excellent sensitivity with high fidelity color reproduction
- ❑ Stable, reliable camera drivers for running multiple cameras on a PC or other USB devices
- ❑ Selectable 8 or 12-bit pixel data
- ❑ High-speed USB 2.0 (480Mbps/sec) allows for simplified cabling
- ❑ Frame rates up to 3 fps in burst mode / Up to 2 fps in continuous snap shot mode
- ❑ Camera gain up to 27X (28.6dB)
- ❑ GPIOs for control of peripherals and synchronization of lighting (3in/4out)
- ❑ FCC Class B, CE Certified
- ❑ Canon bayonet-style mount provided
- ❑ DirectShow compatible
- ❑ USB cameras are software compatible with Windows XP and Vista 32 and 64-bit operating systems
- ❑ Auto focus and auto iris capable with compatible Canon lenses
- ❑ Complete SDK available
- ❑ Full one (1) year warranty

Specifications

Lw16059

Image Sensor	43.3mm (diagonal), color or mono, 36.1mm x 24.0mm array (3:2 Aspect Ratio)
Effective Pixels	4872 x 3248, 7.4µm square pixels
Frame Rate	3 fps at full resolution in burst mode / 2 fps at full resolution in continuous snap shot mode
Sensitivity	Excellent
Exposure	Manual & Auto
White Balance	Manual & Auto
Dynamic Range	64dB
On-Board Memory	64MB, 4 frames at full resolution (in 8 bit mode)
Dimensions (W x H x D)	3.25 x 2.98 x 5.59 inches
Mass	850 grams
Power Requirement	External 12VDC, 2A (included)
Power Consumption	~18.7 Watts
Operating Temperature	0°C to +50°C
Operating Humidity	5%-95%, Non-condensing
Interface Connector	Standard USB cable
Lens Mount (Lens not included)	Canon-mount provided



Full Customization available to meet your exact needs!

Available Options:

Board Level/Enclosed
Custom enclosures

Contact us for more specific details.

Ordering Information

- Lw16059C - 16 Megapixel Canon-Mount Enclosed Color Camera
- Lw16059M - 16 Megapixel Canon-Mount Enclosed Monochrome Camera
- LuSDK - Software Developer's Kit and Accessories

