Lumenera corporation

Lw16059

16 Megapixel USB 2.0 Camera

Outline

Performance Features

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.
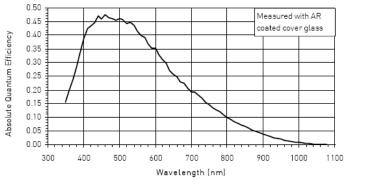
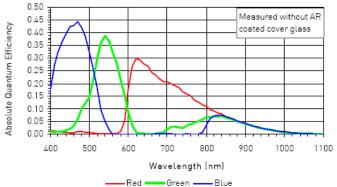- ❑ **16 megapixel sensor, 4872 x 3248 resolution, with global shutter**
- ❑ **2x2/4x4 color binning increases sensitivity and frame rate**
- ❑ **Large dynamic range**
- ❑ **Excellent sensitivity with high fidelity color reproduction**
- ❑ **Stable, reliable camera drivers for running multiple cameras on a PC or other USB devices**
- ❑ **Selectable 8 or 12-bit pixel data**
- ❑ **High-speed USB 2.0 (480Mbits/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)**
- ❑ **GPI/Os 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
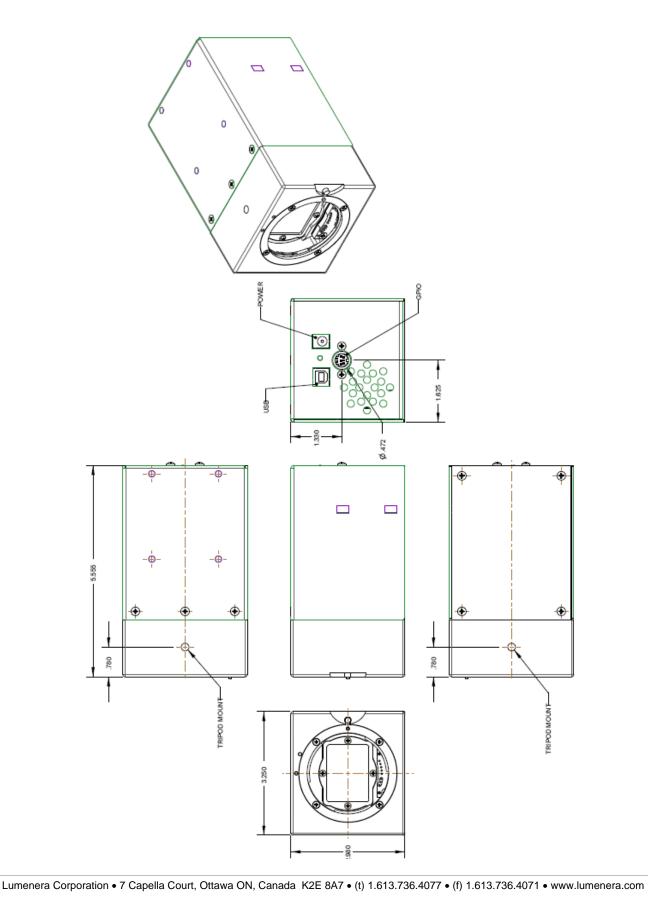
Lw16059C - 16 Megapixel Canon-Mount
                   Enclosed Color Camera

Lw16059M - 16 Megapixel Canon-Mount
                   Enclosed Monochrome Camera

LuSDK   - Software Developer's Kit and
                   Accessories

POWER

GPIO

USB

1.625

1.330

Ø .472

5.555

.780

.780

TRIPOD MOUNT

TRIPOD MOUNT

3.250

.980