



## Outline

Lumenera's Lw11059/8/7 series of industrial megapixel cameras are specifically designed for applications requiring large field of view, fast frame rates, low noise, and high sensitivity. With 4008 x 2672 resolution, one of these cameras can be implemented in a system where several cameras were previously required. Fast frame rates dramatically increase throughput and productivity, while on-board processing, auto focus and auto iris provide optimal image quality. This camera series is ideally suited for poorly illuminated or high light contrast environments.

For high quality images with no smear effect, the Lw11059/8/7 series features a global shutter, which functions similarly to a mechanical shutter but with a much shorter exposure time. The global shutter allows simultaneous integration of the entire pixel array, while the image from the previous frame is read out – ideal for capturing objects in high-speed motion.

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.

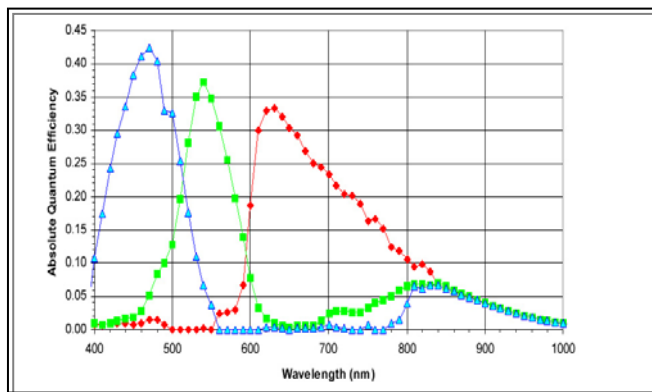
## Performance Features

- 10.7 megapixel sensor, 3648 x 2670 resolution, with global shutter
- Large dynamic range
- New architecture now without cooling fan
- Excellent tap matching
- Pixel correction in the camera
- Excellent sensitivity with high fidelity color reproduction
- Selectable 8 or 12-bit pixel data
- High-speed USB 2.0 (480Mbps/sec) allows for simplified cabling
- Frame rates up to 5fps in burst mode / Up to 3.5fps 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, optional F-mount and K-mounts available
- DirectShow compatible
- 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

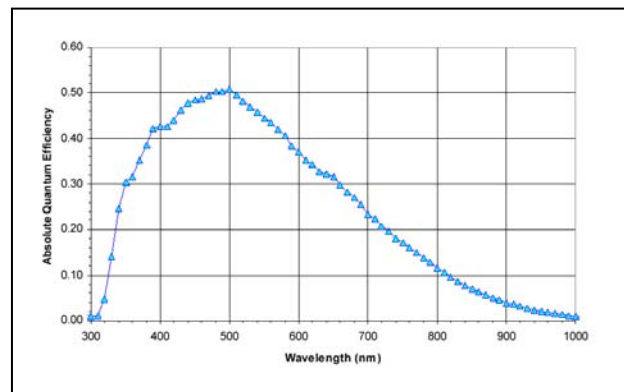
# Specifications

Lw11059/8/7

|                                |  |
|--------------------------------|--|
| Image Sensor                   | <b>43.3mm (diagonal), color or mono, 36.1mm x 24.0mm array</b>   |
| Effective Pixels               | <b>4008x2672, 9.0µm square pixels</b>  |
| Frame Rate                     | <b>5fps at full resolution in burst mode / 3.5fps at full resolution in continuous snap shot mode</b>                      |
| Sensitivity                    | <b>Excellent</b>   |
| Exposure                       | <b>Manual &amp; Auto</b>   |
| White Balance                  | <b>Manual &amp; Auto</b>   |
| Dynamic Range                  | <b>65dB</b>  |
| On-Board Memory                | <b>32MB, 2 frames at full resolution</b>   |
| Dimensions (W x H x D)         | <b>Lw11059 – 3.25 x 2.98 x 5.59 inches<br/>Lw11058 – 3.25 x 2.98 x 5.61 inches<br/>Lw11057 – 3.25 x 2.98 x 5.56 inches</b> |
| Mass                           | <b>850 grams</b>   |
| Power Requirement              | <b>External 12VDC, 2A (included)</b>   |
| Power Consumption              | <b>~18.7 Watts</b>   |
| Operating Temperature          | <b>0°C to +50°C</b>  |
| Operating Humidity             | <b>5%-95%, Non-condensing</b>  |
| Interface Connector            | <b>Standard USB cable</b>  |
| Lens Mount (Lens not included) | <b>Canon-mount provided, Optional F- and K-mounts available</b>  |



Color Response Curve



Monochrome Response Curve

**Full Customization available to meet your exact needs!**

**Available Options:**

Without sensor cover glass  
Board Level/Enclosed  
Custom enclosures  
Class 1, Class 0 sensors  
Sensors without Microlens

Contact us for more specific details.

## Ordering Information

- Lw11059CB – 10.7 Megapixel Canon-Mount Enclosed Color Camera
- Lw11059MB – 10.7 Megapixel Canon-Mount Enclosed Monochrome Camera
- Lw11058CB – 10.7 Megapixel K-Mount Enclosed Color Camera
- Lw11058MB – 10.7 Megapixel K-Mount Enclosed Monochrome Camera
- Lw11057CB – 10.7 Megapixel F-Mount Enclosed Color Camera
- Lw11057MB – 10.7 Megapixel F-Mount Enclosed Monochrome Camera
  
- LuSDK – Software Developer's Kit and Accessories

