

Lw11059 Lw11058 Lw11057

10.7 Megapixel USB 2.0 Camera





Outline

Performance Features

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.

- □ 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 (480Mbits/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)
- GPI/Os for control of peripherals and synchronization of lighting (3in/4out)
- □ FCC Class B, CE Certified
- Canon bayonet-style mount provided, optional Fmount 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 43.3mm (diagonal), color or mono, 36.1mm x 24.0mm array

Effective Pixels 4008x2672, 9.0µm square pixels

Frame Rate 5fps at full resolution in burst mode / 3.5fps at full resolution in continuous snap shot mode

Sensitivity Excellent
Exposure Manual & Auto
White Balance Manual & Auto

Dynamic Range 65dB

On-Board Memory 32MB, 2 frames at full resolution

Dimensions (W x H x D) Lw11059 - 3.25 x 2.98 x 5.59 inches
Lw11058 - 3.25 x 2.98 x 5.61 inches

Lw11057 - 3.25 x 2.98 x 5.56 inches

Mass 850 grams

Power Requirement External 12VDC, 2A (included)

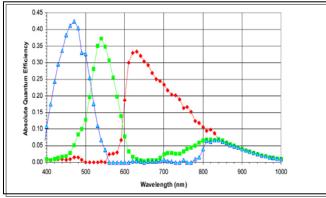
Power Consumption ~18.7 Watts
Operating Temperature 0°C to +50°C

Operating Humidity 5%-95%, Non-condensing Interface Connector Standard USB cable

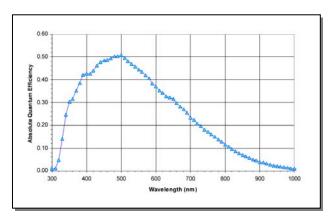
Lens Mount (Lens not

Canon-mount provided, Optional F- and K-mounts available









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

Mechanicals Lw11059/8/7

