





#### 60 FPS AT FULL RESOLUTION

- EXCELLENT SENSITIVITY
- GLOBAL ELECTRONIC SHUTTER
- LIGHT, COMPACT, ROBUST
- LOCKING MINI USB 2.0 CONNECTOR

### **Outline**

Lumenera's new Lm075 mini CCD USB 2.0 cameras are designed for industrial and scientific applications, particularly those with low light conditions and tight space constraints.

Measuring 44x44x56mm, these compact cameras offer the same performance as our enhanced USB 2.0 camera line, delivering outstanding image quality and value. Features include new locking industrial mini USB and RJ45 GPI/O connector, multiple mounting points, 60 fps at full 640x480 resolution, 100+ fps at 320x240 binning mode, and on-board processing. Both color and monochrome product models are available.

Electronic Global Shutter provides capabilities similar to a mechanical shutter, allowing simultaneous integration of the entire pixel array, and then stopping exposure while image data is read out - idea for capturing objects in high-speed motion.

Uncompressed images in live streaming video and still image capture are provided across a mini 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.

Hardware and software based synchronization trigger is provided standard. 32 MB on-board memory is available for frame buffering.

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**

- □ Small form factor measuring 44x44x56mm
- □ High quality CCD sensor
- Locking industrial mini USB and RJ45 GPI/O connector for control of peripherals and synchronization of lighting
- 3 software configurable bidirectional I/O ports and 2 optically isolated ports (1in/1out)
- □ Based on Lw camera platform with 32 MB RAM
- Excellent sensitivity
- □ Simplified cabling video, power and full camera control over a single mini USB cable
- □ 8 mounting points
- □ Color or monochrome, interline transfer, progressive scan VGA CCD sensor
- Binning and Region of Interest (ROI) options improve sensitivity and provide higher frame rates
- □ FCC Class B, CE Certified
- □ Select 8 or 12-bit pixel data
- DirectShow compatible
- USB cameras are software compatible with Windows 2K, Windows XP, and Windows Vista operating systems
- **Complete SDK available**
- □ Full one (1) year warranty

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# **Specifications**

Lm075
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Image Sensor	1/3" format, 4.7mm x 3.6mm array
Effective Pixels	640 x 480, 7.4µm square pixels
Frame Rate	60 fps at 640x480, 100+ fps at 320x240 (binning or ROI)
Sensitivity	High
Dynamic Range	60dB
Exposure	Auto / Manual
White Balance	Auto / Manual
Dimensions (W x H x D)	44 x 44 x 56mm
Mass	~130 grams
Power Requirement	USB bus power
Power Consumption	~2.5 Watts
Operating Temperature	0°C to +50°C
Operating Humidity	5% - 95%, Non-condensing
Interface Connector	Locking mini USB cable & RJ45 GPI/O connector

Lens Mount (Lens not included)



Color Response

# Full customization available to meet your exact needs!

#### Available Options:

Without Standard IR-Cut Filter Without Glass Without Mount Board Level Adjustable CS-Mount

Contact us for more specific details.





Monochrome Response

#### **Ordering Information**

Lm075C Lm075M	– Mini Color Camera Module – Mini Monochrome Camera Module
LuSDK	- Software Developer's Kit
Lu905	– Tripod Mount

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# **Mechanicals**

### Lm075

### Lm075 Camera:



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