



## 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 industrial USB locking and 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.

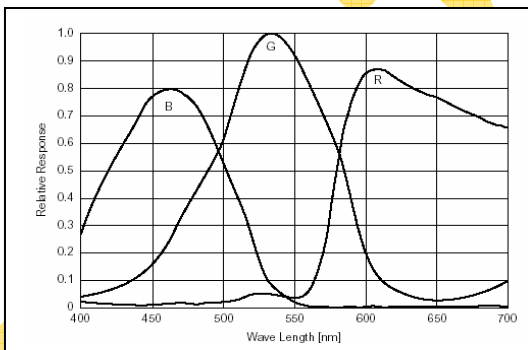
Hardware and software based synchronization trigger is provided standard. 32 MB on-board memory is available for frame buffering.

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.

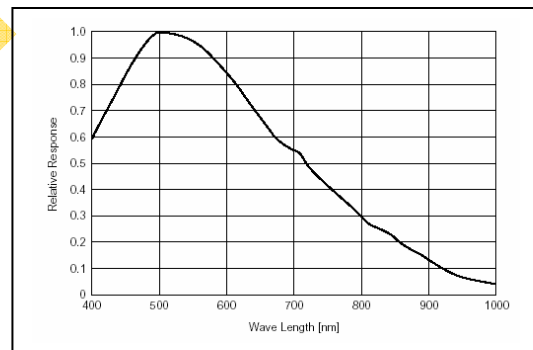
## Performance Features

- Small form factor measuring 44x44x56mm**
- High quality CCD sensor with electronic global shutter**
- Locking industrial USB and GPI/O connector for control of peripherals and synchronization of lighting (1in/1out)**
- 3 software configurable bidirectional I/O ports**
- Based on Lw camera platform with 32 MB RAM**
- Simplified cabling - video, power and full camera control over a single mini USB cable**
- Excellent sensitivity**
- 8 mounting points**
- Color or monochrome, interline, progressive scan, 640x480 resolution**
- Auto white balance & s/w adjustable exposure**
- On-board image buffer**
- FCC Class B, CE Ready**
- Select 8 or 12-bit pixel data**
- DirectShow/DirectX compatible**
- USB cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems**
- Complete SDK available**
- Full one (1) year warranty**

Image Sensor	<b>1/3" format, 4.7mm x 3.6mm array</b>
Effective Pixels	<b>640 x 480, 7.4µm square pixels</b>
Frame Rate	<b>60 fps at 640x480, 100+ fps 320x240 (binning)</b>
Sensitivity	<b>High</b>
Dynamic Range	<b>60dB</b>
Exposure	<b>Auto / Manual</b>
White Balance	<b>Auto / Manual</b>
Dimensions (W x H x D)	<b>44 x 44 x 56mm</b>
Mass	<b>TBD</b>
Power Requirement	<b>USB bus power or external 5VDC, 500mA</b>
Power Consumption	<b>~2.5 Watts</b>
Operating Temperature	<b>0°C to +50°C</b>
Operating Humidity	<b>5% - 95%, Non-condensing</b>
Interface Connector	<b>Mini USB cable &amp; locking industrial USB &amp; GPI/O connector</b>
Lens Mount (Lens not included)	<b>Adjustable C-Mount, (CS-Mount option)</b>



Color Response



Monochrome 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.

**Ordering Information**

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