

## Outline

Lumenera's Lu070 series of cameras are designed to be used in a wide variety of industrial applications, particularly in low light conditions. Both color and monochrome product models are available.

With 640x480 resolution and on-board processing these cameras deliver outstanding image quality and value for industrial and scientific imaging applications.

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. Ideal for capturing objects in high-speed motion.

Uncompressed images in live 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, with sample code available to quickly integrate camera functions into OEM applications.

Hardware and software based synchronization trigger is provided standard. On-board memory is available for frame buffering. Lu070 series cameras are offered in both enclosed and board-level form. Custom form factor (sizes) can be provided.

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. Products come with a full one (1) year warranty.

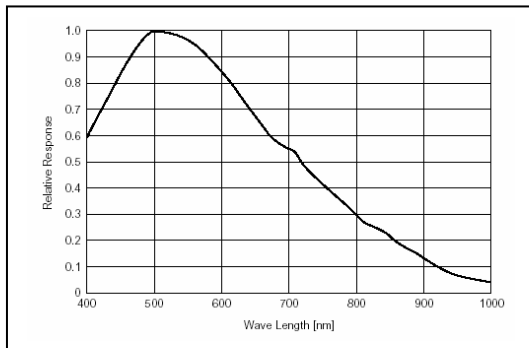
## Performance Features

- Global electronic shutter
- Excellent sensitivity
- High speed USB 2.0 (480Mbits/sec)
- Color or monochrome, interline, progressive scan, 640x480 resolution
- 60 fps at full 640x480  
+100 fps 320x240 (binning mode)
- Auto white balance & s/w adjustable exposure
- On-board image buffer
- GPIOs for control of peripherals and synchronization of lighting (4in/4out)
- FCC Class B, CE Ready
- Select 8 or 12-bit pixel data
- Simplified cabling - video, power and full camera control over a single USB cable
- DirectShow compatible
- C-Mount provided
- USB cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems
- Complete SDK available

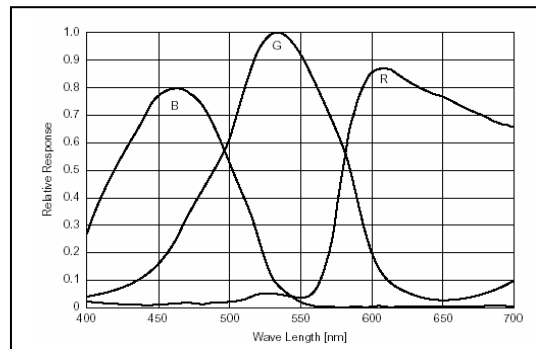
# Specifications

# Lu070

Image Sensor	<b>1/3" format, 5.8mm x 4.9mm array</b>
Effective Pixels	<b>640 x 480, 7.4um 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>2.00 x 2.50 x 1.63 inches (board level)</b> <b>2.25 x 3.85 x 1.56 inches (enclosed)</b>
Mass	<b>~150g / 300g with enclosure</b>
Power Requirement	<b>USB bus power, or external 6VDC, 700mA</b>
Power Consumption	<b>~4 Watts</b>
Operating Temperature	<b>0°C to +50°C</b>
Operating Humidity	<b>0% - 95%, Non-condensing</b>
Interface Connector	<b>Standard USB cable</b>
Lens Mount (Lens not included)	<b>C-Mount, (CS-Mount option)</b>



Monochrome Response



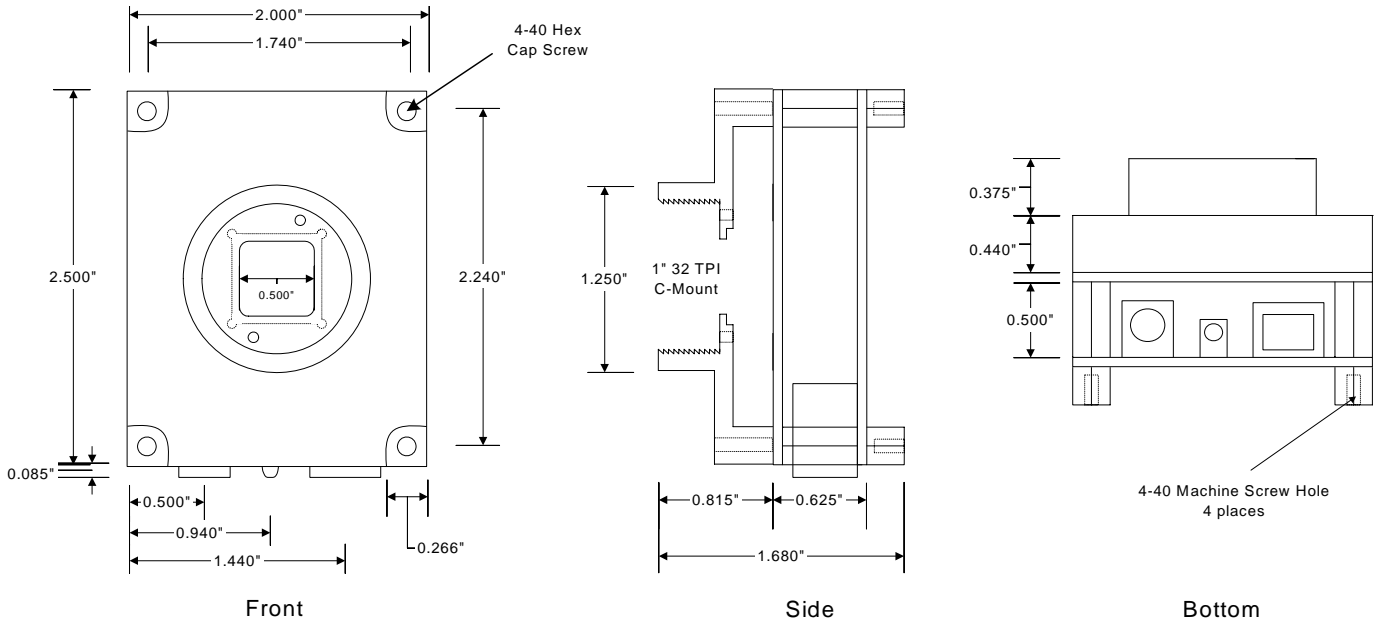
Color Response

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

## Ordering Information

Lu070M	– Monochrome Camera Module
Lu070C	– Color Camera Module
Lu075M	– Enclosed Monochrome Camera
Lu075C	– Enclosed Color Camera
LuSDK	– Software Developer's Kit

## OEM Board-Level Camera



## Enclosed Camera

