

Outline

Lumenera's Lu070 series of cameras are designed to be used in a wide variety of industrial applications, particularly in low light conditions. 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 USB2.0 digital interface. No frame-grabber 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.

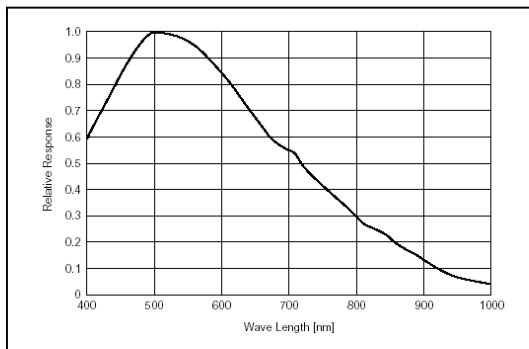
Features

- Global electronic shutter**
- Excellent sensitivity**
- High speed USB2.0 (480Mbits/sec)**
- Color or monochrome, interline, progressive scan, 640 x 480 resolution**
- 60 fps at full 640 x 480
100+ fps 320x240 (binning mode)**
- Auto white balance & s/w adjustable exposure**
- On-board image buffer**
- GPI/Os for control of peripherals and synchronization of lighting (4in/4out)**
- FCC Class B, CE Ready**
- Select 8 or 10-bit pixel data**
- Simplified cabling - video, power and full camera control over a single USB cable**
- Direct Show 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.**

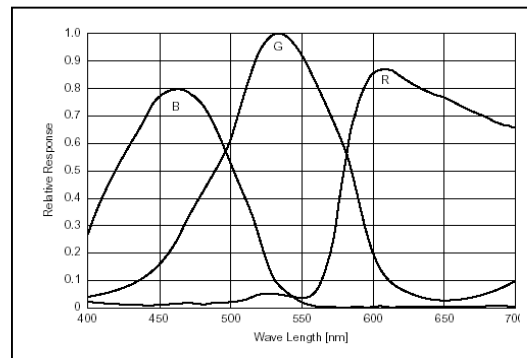
Specifications

Lu070

Image Sensor	1/3" format, 5.8mm x 4.9mm array
Effective Pixels	640 x 480, 7.4um square pixels
Frame Rate	60 fps at 640x480, 100+ fps 320x240 (binning)
Sensitivity	High
Exposure	Auto / Manual
White Balance	Auto / Manual
Dimensions (W x H x D)	2.00 x 2.50 x 1.63 inches (board level) 2.25 x 3.85 x 1.56 inches (enclosed)
Mass	~150g / 300g
Power Requirement	USB bus power, or external 6VDC, 500mA
Power Consumption	~2.5Watts
Operating Temperature	-10° C to +50° C
Operating Humidity	20%-80%, Non-condensing
Interface Connector	Standard USB cable
Lens Mount	C-Mount (CS-mount option)
Frame Buffer	10 frame buffer (optional expansion to 50 frames)



Monochrome Response



Color Response

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

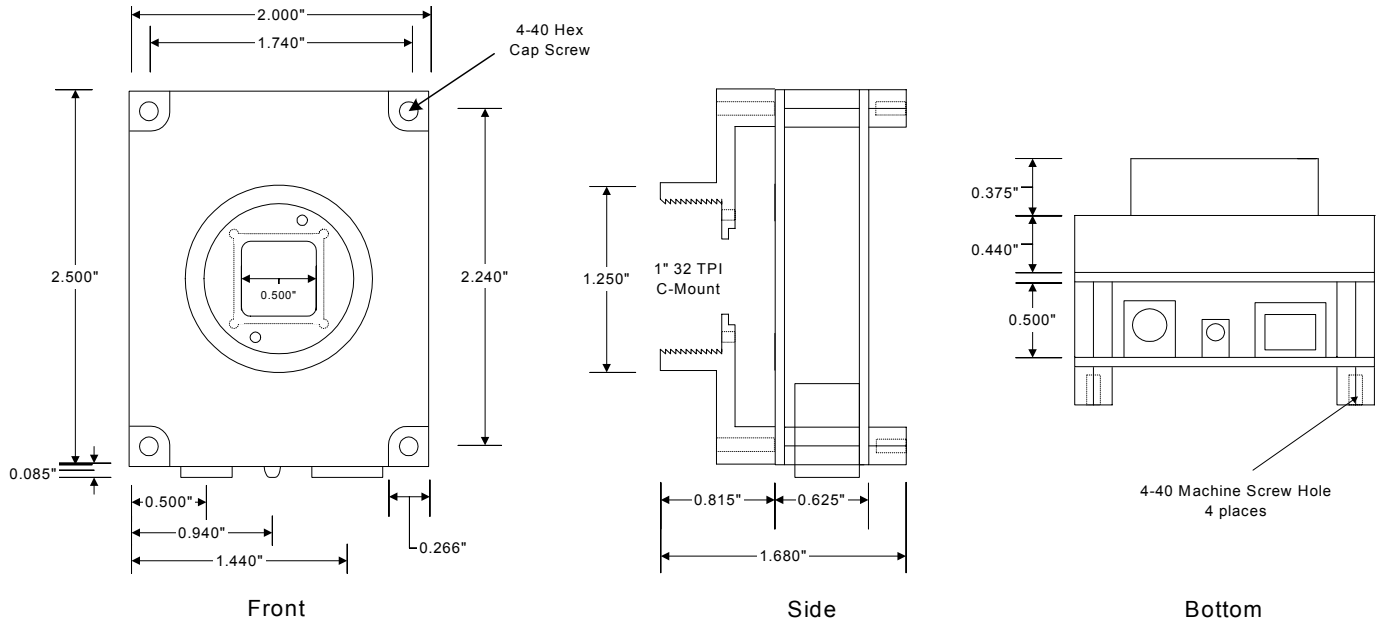
Ordering Information

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

Mechanicals

Lu070

OEM Board-Level Camera



Enclosed Camera

