



Outline

Lumenera's Lu080 series of cameras are designed for use in a wide variety of industrial applications, particularly high-speed applications. 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. It's 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. Lu080 series cameras are offered in both enclosed and board-level form. Custom form factors (sizes) can be provided.

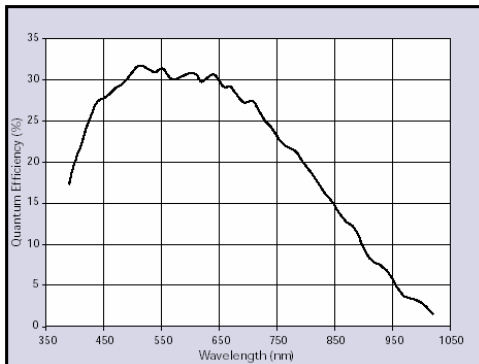
All Lumenera products are supported by an experienced team of software developers and application engineers. We understand your imaging needs and are here to help you with your integration and development.

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

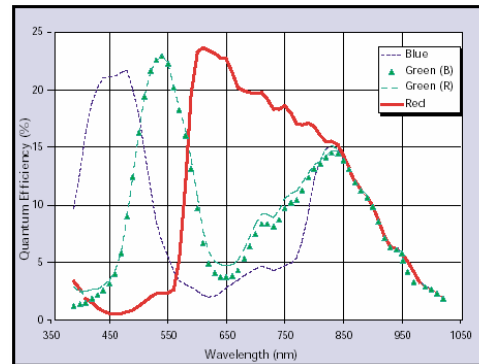
Performance Features

- ❑ **Color or Monochrome, progressive scan, VGA sensor**
- ❑ **High speed USB 2.0 (480Mbps/sec)**
- ❑ **65 fps at full 640x480 resolution**
- ❑ **Reduced region of interest provides faster frame rates**
- ❑ **Global shutter for capturing fast moving objects**
- ❑ **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 and full camera control over a single USB cable**
- ❑ **C-Mount provided**
- ❑ **DirectShow compatible**
- ❑ **USB cameras are software compatible with Windows™ 98 SE, Windows Me, Windows 2000 and Windows XP operating systems**
- ❑ **Complete SDK available**

Image Sensor	1/2" format, color or mono sensor
Effective Pixels	640 x 480, 9.9 μm square pixels
Frame Rate	65 fps at 640x480, faster with ROI
Sensitivity	2 V / lux-sec
Dynamic Range	60dB
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 enclosed)
Power Requirement	USB bus power, or external 6VDC, 500mA
Power Consumption	~2.5 Watts
Operating Temperature	0°C to +50°C
Operating Humidity	0% - 95%, Non-condensing
Interface Connector	Standard USB
Lens Mount (Lens not included)	C-Mount (CS-Mount option)



Mono Response Curve



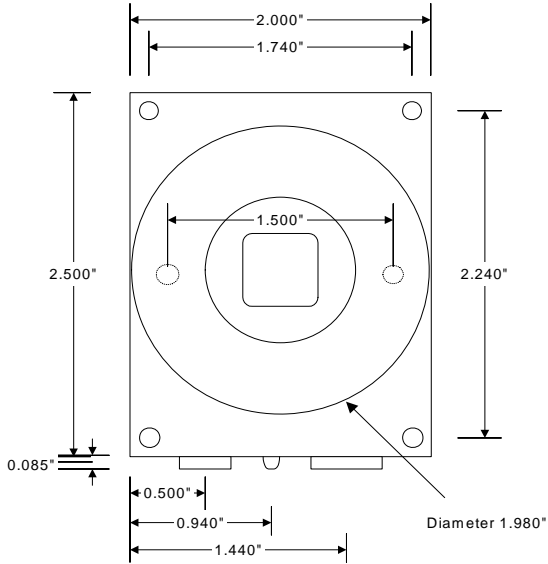
Color Response Curve

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

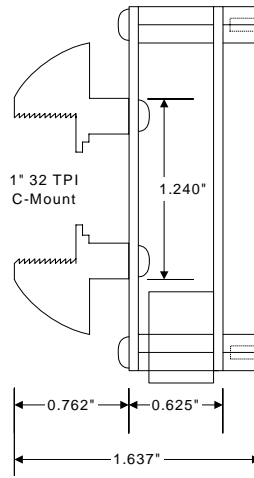
Ordering Information

Lu080M	- Monochrome Camera Module
Lu080C	- Color Camera Module
Lu085M	- Enclosed Monochrome Camera
Lu085C	- Enclosed Color Camera
LuSDK	- Software Developer's Kit

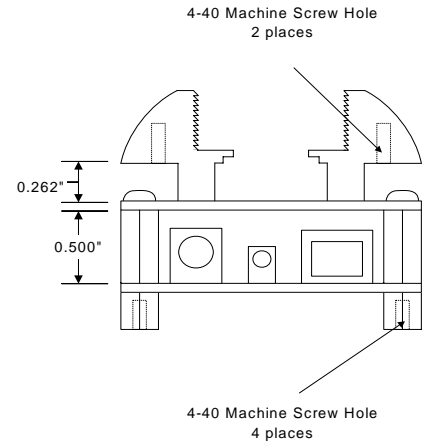
OEM Board-Level Camera



Front



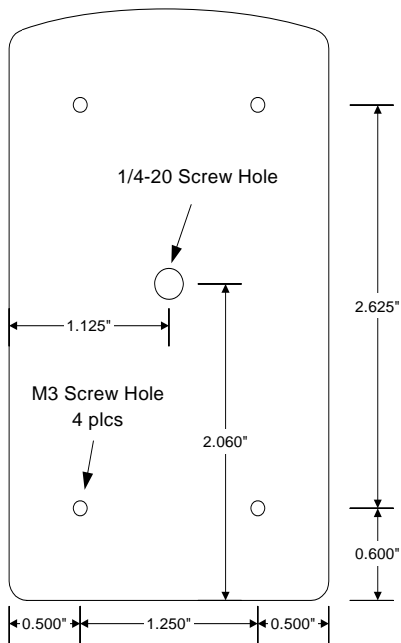
Side



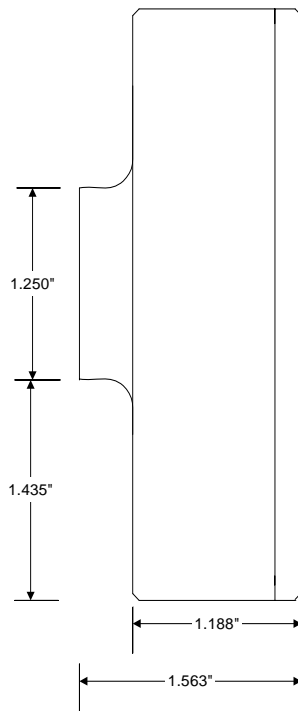
Bottom

Enclosed Camera

Back

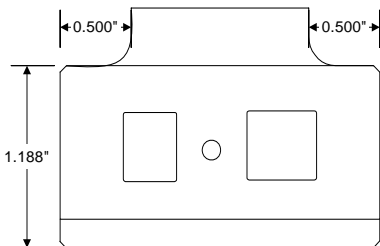
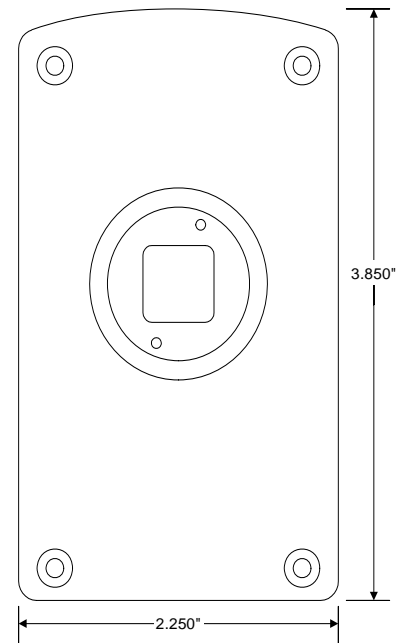


Bottom



Side

Front



* Anodized aluminum, std color - black