

Lu100

USB2 Megapixel Camera



Outline

Lumenera's Lu100 series of megapixel cameras are designed to be used in a wide variety of applications. Both color and monochrome product models are available.

With 1280x1024 resolution and on-board processing these cameras deliver outstanding image quality and value for industrial and scientific imaging applications.

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. Lu100 model 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.

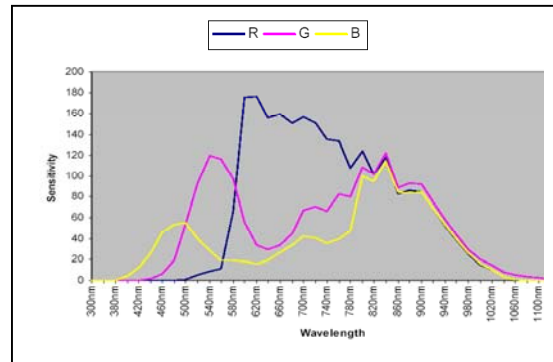
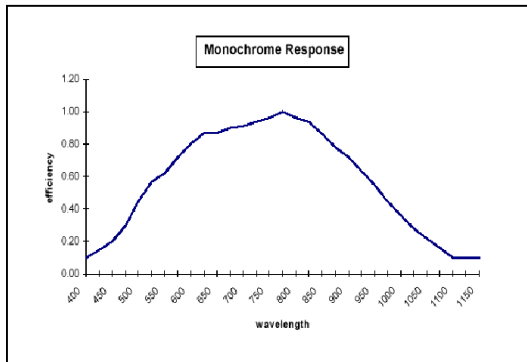
Features

- ❑ **Color or Monochrome, Progressive scan, 1.3 Megapixel sensor**
- ❑ **High speed USB2.0 (480Mbits/sec)**
- ❑ **15 fps at full 1280 x 1024 resolution
60 fps at 640x480 (sub-sampled)**
- ❑ **Higher frame rate at lower resolution with full sub-window control**
- ❑ **Auto White Balance & Auto Exposure**
- ❑ **Snap-shot mode for use with strobe**
- ❑ **GPI/Os for control of peripherals and synchronization of lighting (4in/4out)**
- ❑ **FCC Class B, CE Ready**
- ❑ **RGB Bayer video output**
- ❑ **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

Lu100

Image Sensor	1/2" format, color or mono, 6.6mm x 5.3mm array
Effective Pixels	1280 x 1024, 5.2um square pixels
Frame Rate	15 fps at 1280x1024, 60fps at 640x480 (sub-sampled)
Sensitivity	High
Dynamic Range	60dB
Auto Exposure	Automatic / Manual
White Balance	Automatic / 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	0° C to +50° C
Operating Humidity	20%-80%, Non-condensing
Interface Connector	Standard USB cable
Lens Mount	C-Mount (CS-mount option)
Frame Buffer	3 frame buffer (optional expansion to 12 frames)



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

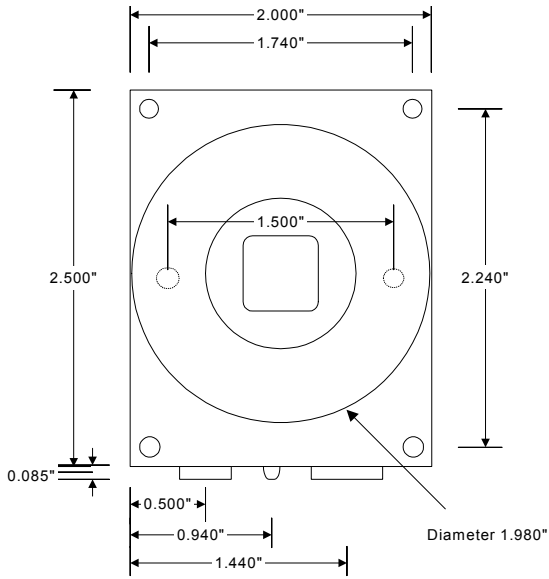
Ordering Information

Lu100M	- Monochrome Camera Module
Lu100C	- Color Camera Module
Lu105M	- Enclosed Monochrome Camera
Lu105C	- Enclosed Color Camera
LuSDK	- Software Developer's Kit

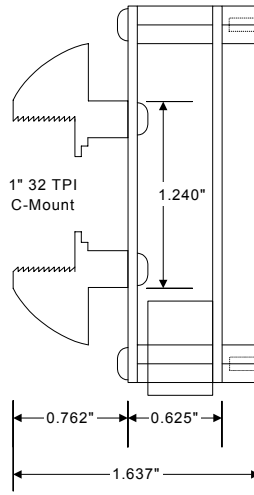
Mechanicals

Lu100

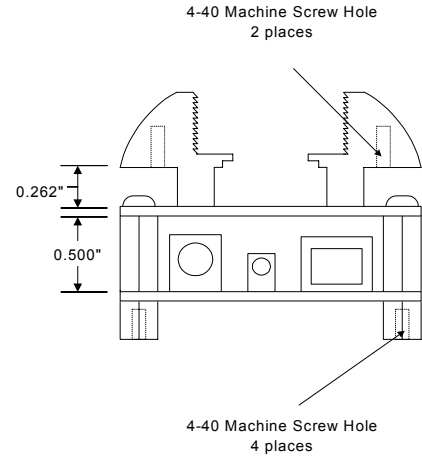
OEM Board-Level Camera



Front



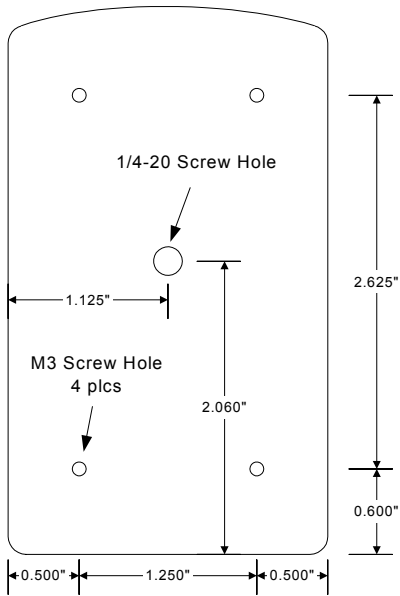
Side



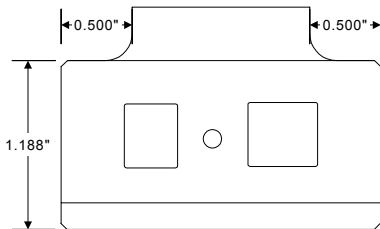
Bottom

Enclosed Camera

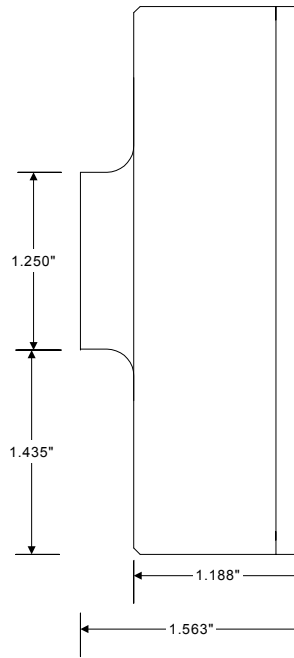
Back



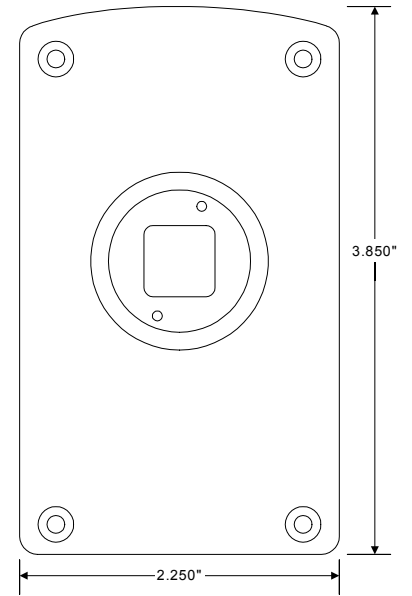
Bottom



Side



Front



* Anodized aluminum, std color - black