

# Lu270

## USB2 Megapixel Camera



### Outline

Lumenera's Lu270 series of megapixel cameras are designed to be used in a wide variety of applications. Color product model currently available (Monochrome available Q1/04).

With 1600x1200 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. Lu270 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.

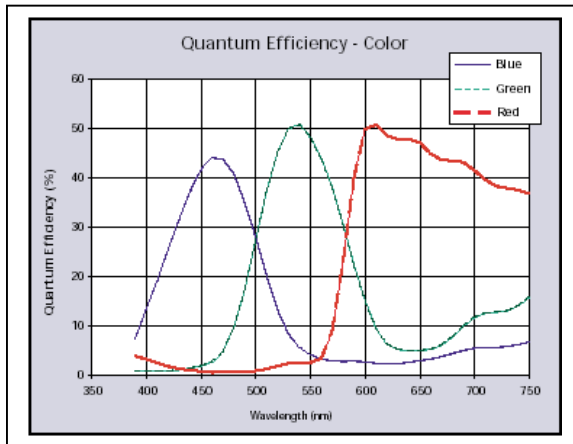
### Features

- Lower Fixed Pattern Noise**
- Color, Progressive scan, 2.0 Megapixel Image Sensor**
- High speed USB2.0 (480Mbps/sec)**
- 10 fps at full 1600 x 1200 resolution  
50 fps at 640x480**
- Faster frame rates with reduced region of interest**
- Auto White Balance**
- 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**
- C-Mount provided**
- TWAIN and Direct Show compatible**
- USB cameras are software compatible with Windows™ 98 SE, Windows Me, Windows 2K and Windows XP operating systems**
- Complete SDK available.**

# Specifications

# Lu270

Image Sensor	<b>1/2" format, color or mono, 6.7mm x 5.0mm array</b>
Effective Pixels	<b>1600 x 1200, 4.2um square pixels</b>
Frame Rate	<b>10 fps at 1600x1200, 50fps at 640x480</b>
Sensitivity	<b>High</b>
Dynamic Range	<b>60dB</b>
Auto Exposure	<b>Automatic / Manual</b>
White Balance	<b>Automatic / Manual</b>
Dimensions (W x H x D)	<b>2.00 x 2.50 x 1.63 inches (board level) 2.25 x 3.85 x 1.56 inches (enclosed)</b>
Mass	<b>~150g / 300g</b>
Power Requirement	<b>USB bus power, or external 6VDC, 500mA</b>
Power Consumption	<b>~2.5Watts</b>
Operating Temperature	<b>0° C to +50° C</b>
Operating Humidity	<b>20%-80%, Non-condensing</b>
Interface Connector	<b>Standard USB</b>
Lens Mount	<b>C-Mount (lens not included)</b>
Frame Buffer	<b>1 frame buffer (optional expansion to 8 frames)</b>



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

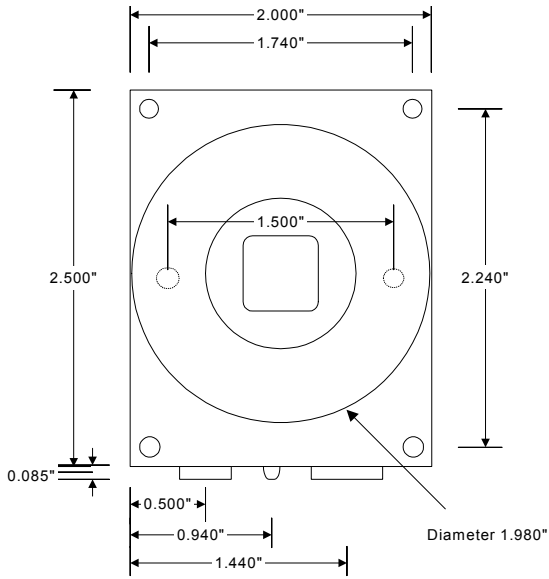
## Ordering Information

Lu270C	- Color Camera Module
Lu275C	- Enclosed Color Camera
LuSDK	- Software Developer's Kit

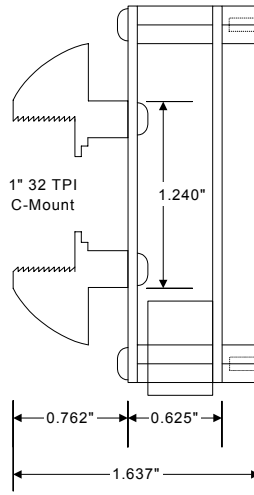
# Mechanicals

# Lu270

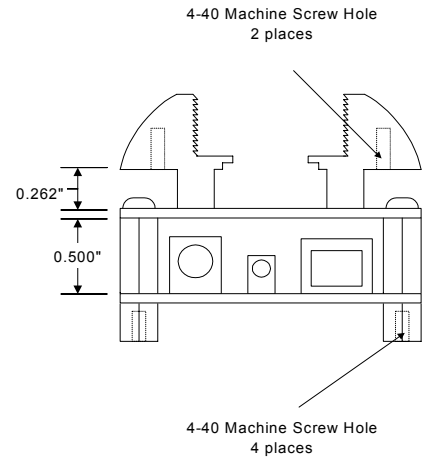
## OEM Board-Level Camera



Front



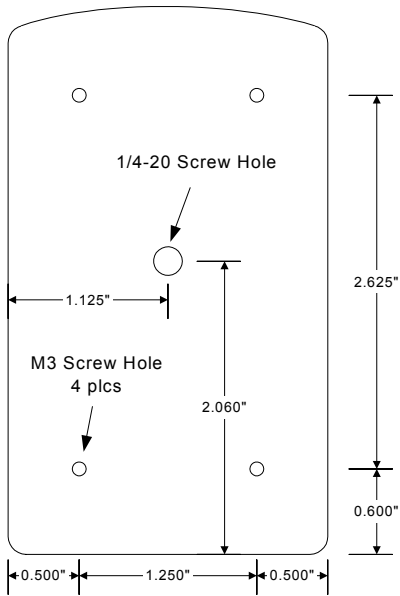
Side



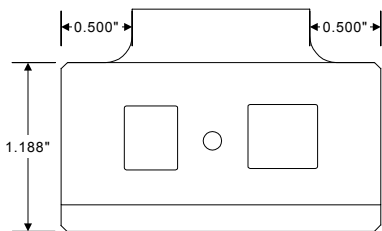
Bottom

## Enclosed Camera

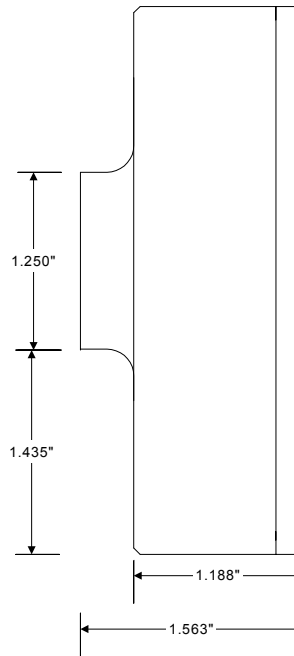
Back



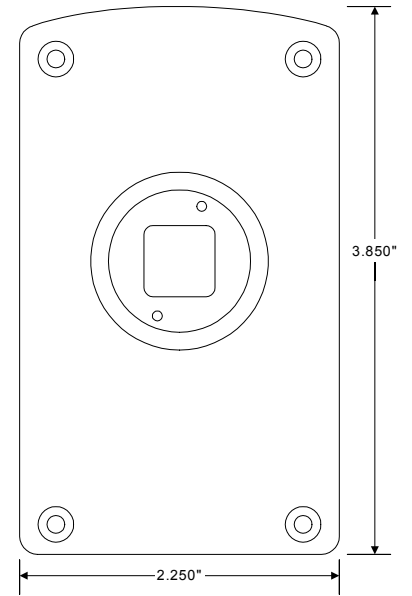
Bottom



Side



Front



\* Anodized aluminum, std color - black