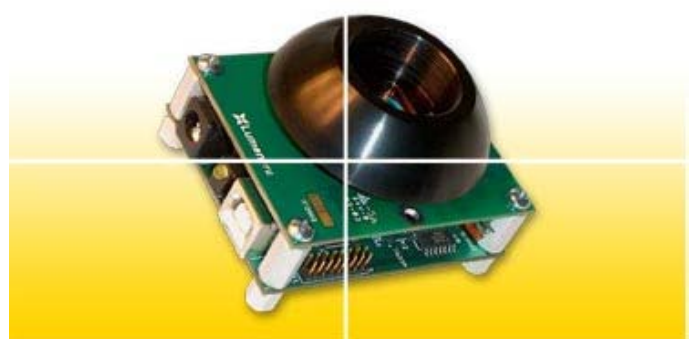


## 2.0 Megapixel USB 2.0 Camera



## Outline

Lumenera's Lu270 series of megapixel cameras are designed to be used in a wide variety of applications where high-fidelity color and high resolution are required.

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 USB 2.0 digital interface. No framegrabber is required. Advanced camera control is available through a complete Software Developer's Kit (SDK), with sample code available to quickly integrate camera functions into OEM applications.

Hardware and software based synchronization trigger is provided standard. 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.

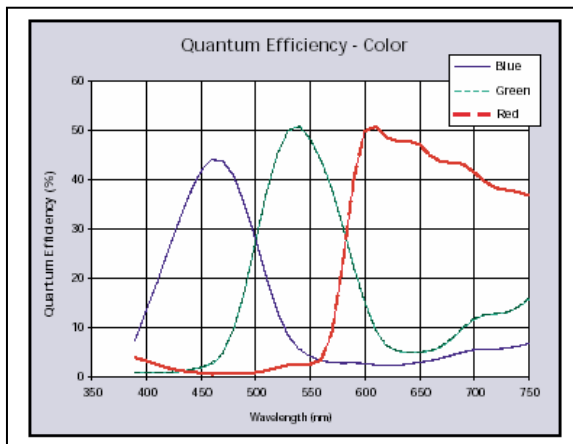
## Performance Features

- Lower Fixed Pattern Noise
- Color, progressive scan, 2.0 Megapixel Image Sensor
- High-speed USB 2.0 (480Mbits/sec)
- 10 fps at full 1600x1200 resolution  
40 fps at 800x600
- Faster frame rates with reduced region of interest
- Auto White Balance
- Snapshot mode for use with strobe
- GPIOs 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
- DirectShow 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, 6.7mm x 5.0mm array</b>  |
| Effective Pixels               | <b>1600x1200, 4.2µm 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)</b><br><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, 500mA</b>   |
| Power Consumption              | <b>~2.5 Watts</b>   |
| Operating Temperature          | <b>0°C to +50°C</b>   |
| Operating Humidity             | <b>0% - 95%, Non-condensing</b>   |
| Interface Connector            | <b>Standard USB</b>   |
| Lens Mount (Lens not included) | <b>C-Mount (CS-Mount option)</b>  |



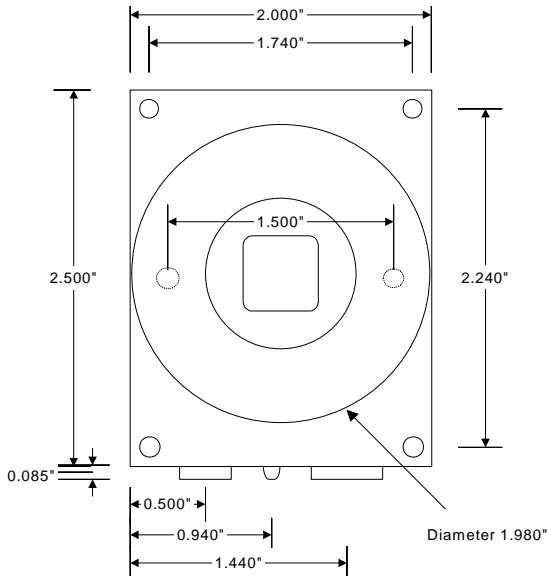
## Ordering Information

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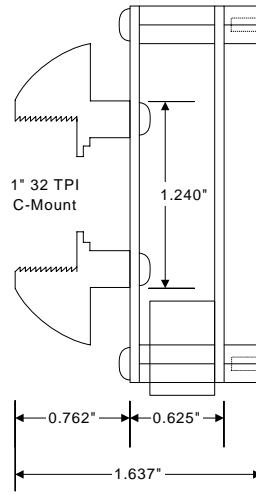
|        |                            |
|--------|----------------------------|
| Lu270C | - Color Camera Module      |
| Lu275C | - Enclosed Color Camera    |
| LuSDK  | - Software Developer's Kit |

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

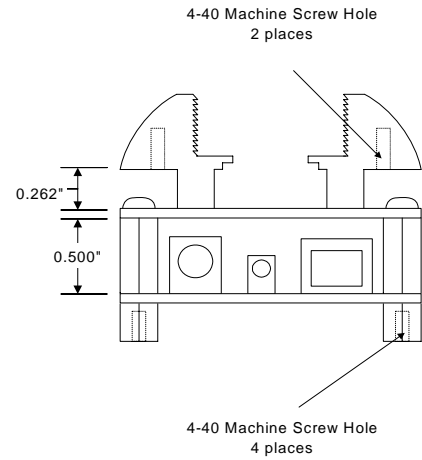
## OEM Board-Level Camera



Front



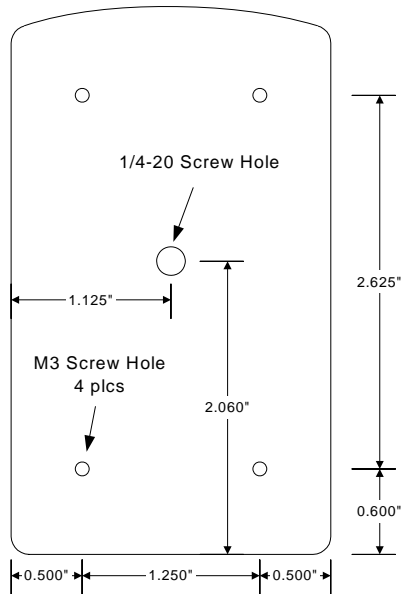
Side



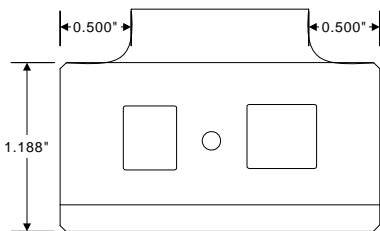
Bottom

## Enclosed Camera

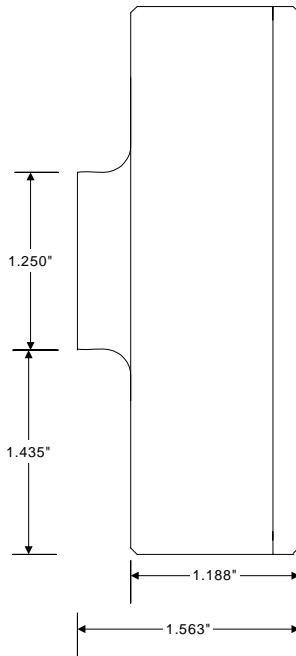
Back



Bottom



Side



Front

