

## 2.0 Megapixel USB 2.0 Camera



## Outline

Lumenera's Lu271 series of megapixel cameras are designed to be used in a wide variety of applications. This single board camera with minimal depth will satisfy the smallest of space requirements.

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. Lu271 model cameras are offered in board-level form although enclosure options and alternative custom form factor (sizes) can be provided. Color (only) product models are available.

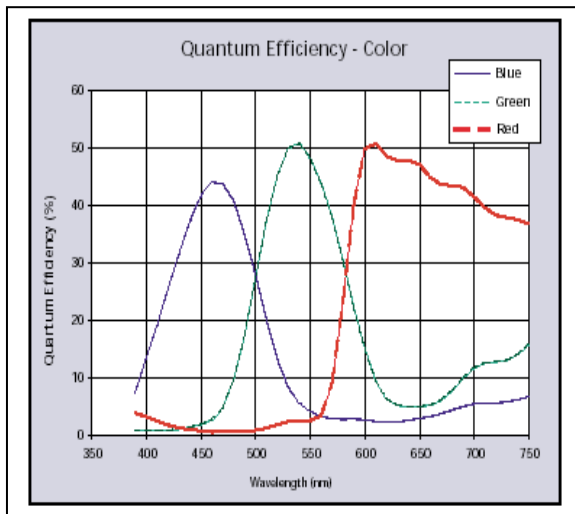
All Lumenera products are supported by an experienced team of software developers and application engineers. We understand your imaging needs and are here to help you with your integration and development.

Stable, reliable camera drivers for running multiple cameras on a PC or other USB devices.

## Performance Features

- Lower Fixed Pattern Noise
- Color, progressive scan, 2.0 megapixel image sensor
- High-speed USB 2.0 (480Mbits/sec)
- 20 fps at full 1600x1200 resolution  
95 fps at 640x480
- Auto white balance, auto exposure
- 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
- CS-Mount provided
- DirectShow compatible
- USB cameras are software compatible with Windows 2K, Windows XP and Vista 32-bit and 64-bit operating systems
- Complete SDK available
- Full one (1) year warranty

Image Sensor	<b>1/2" format, color, 6.7mm x 5.0mm array</b>
Effective Pixels	<b>1600 x 1200, 4.2um square pixels</b>
Frame Rate	<b>20 fps at 1600x1200, 95fps 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 0.85 inches (board level)</b>
Mass	<b>~150g</b>
Power Requirement	<b>USB bus power</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>Mini USB (or optional tethered USB cable with lock)</b>
Lens Mount (Lens not included)	<b>CS-Mount (C-Mount and microlens option)</b>



## Ordering Information

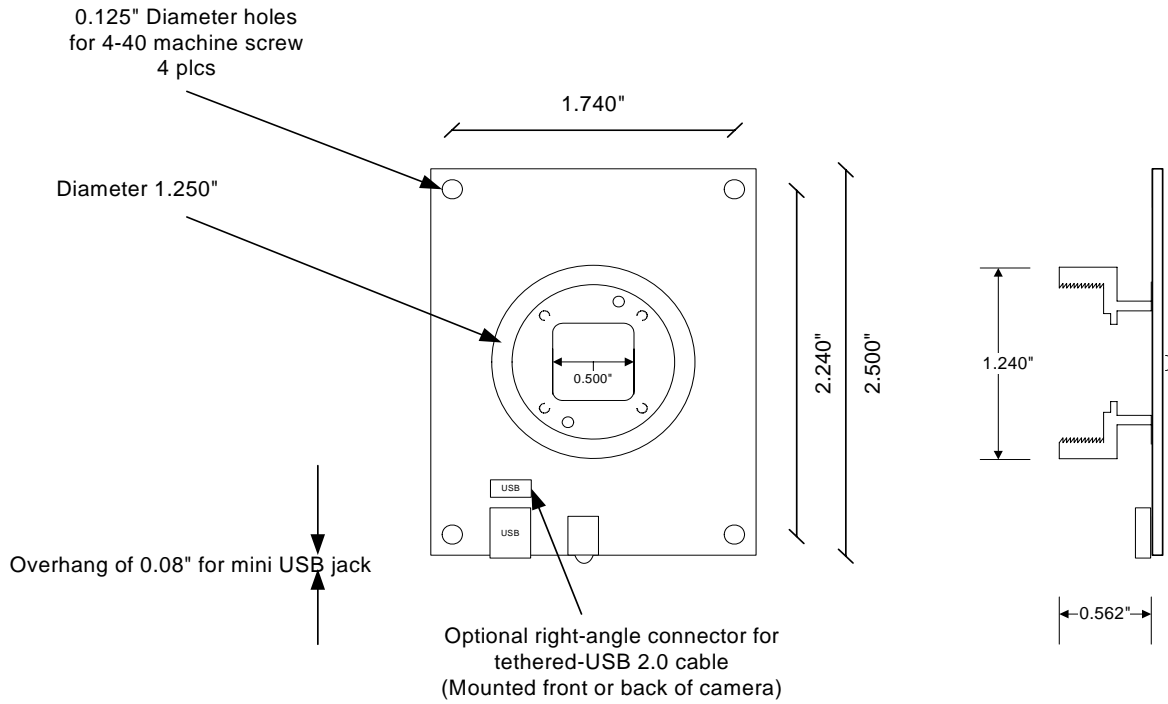
Lu271C - Color Camera Module

LuSDK - Software Developer's Kit

**Please note:** A minimum purchase quantity may apply.

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

## OEM Board-Level Camera



**\*Note:** Microlens and C-Mount options available in place of the CS-Mount above.