

## 3.3 Megapixel USB 2.0 Camera



## Outline

Lumenera's new series of Lu330 CCD color cameras offer excellent sensitivity and high resolution. This is an ideal camera for in-line and off-line inspection where higher resolution detail and archiving is routinely required.

With 2080X1536 resolution and on-board processing, the Lu330 series delivers outstanding image quality for a variety of industrial applications.

Electronic Global Shutter provides capabilities similar to a mechanical shutter, allowing simultaneous integration of the entire pixel array. Ideal for capturing objects in 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 (SDK), with sample code available to quickly integrate camera functions into OEM applications.

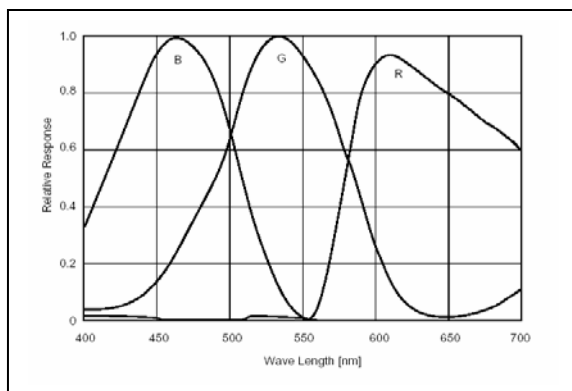
Hardware and software based synchronization trigger is provided standard. Lu330 series cameras are offered in both enclosed and board-level form. Custom form factor (sizes) can be provided.

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

- ❑ **High quality CCD sensor**
- ❑ **Color, interline transfer, interlaced 3.3 megapixel sensor**
- ❑ **6 fps at full 2080x1536 resolution  
30 fps preview mode at VGA resolution**
- ❑ **High-speed USB 2.0 interface (480Mbits/sec)**
- ❑ **Global shutter (interlaced)**
- ❑ **One-Shot White Balance & Exposure**
- ❑ **GPI/Os for control of peripherals and synchronization of lighting (4in/4out)**
- ❑ **FCC Class B, CE Ready**
- ❑ **RGB Bayer video output**
- ❑ **Select 8 or 12-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 2K and Windows XP operating systems**
- ❑ **Complete SDK available**

Image Sensor	<b>1/1.8", 3.3 megapixel, 8.10 x 6.64mm, CCD sensor</b>
Effective Pixels	<b>2080 x 1536, 3.45µm square pixels</b>
Frame Rate	<b>6 fps at full resolution, higher fps with binning and ROI</b>
Read Noise	<b>12 e- rms</b>
Sensitivity	<b>High</b>
Exposure	<b>Manual / One-Shot</b>
White balance	<b>Manual / One-Shot</b>
Dynamic Range	<b>60dB</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>External 6VDC, 800mA (included)</b>
Power Consumption	<b>~4 Watts</b>
Operating Temperature	<b>0°C to +50°C</b>
Operating Humidity	<b>5% - 95%, Non-condensing</b>
Interface Connector	<b>Standard USB cable</b>
Lens Mount (Lens not included)	<b>C-Mount (CS-Mount option)</b>



Color Response Curve

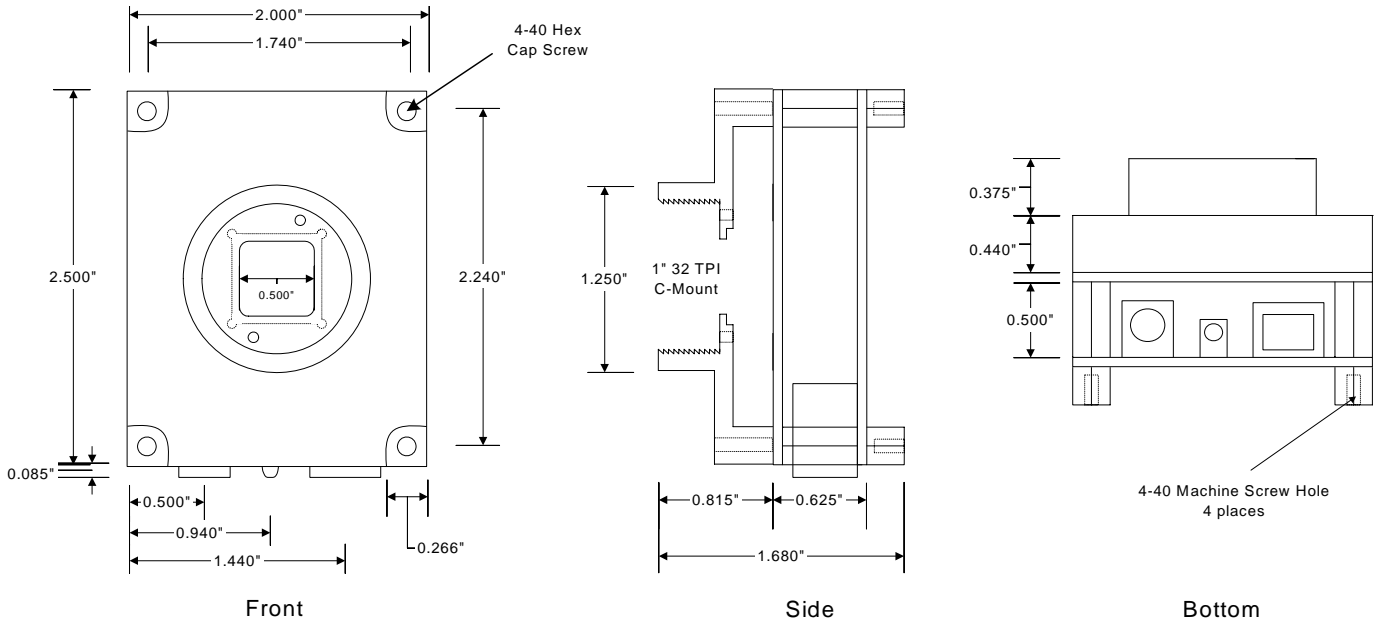
### Ordering Information

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Lu330C	– Color Camera Module
Lu335C	– Enclosed Color Camera
LuSDK	– Developer's Kit and Accessories

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

## OEM Board-Level Camera



## Enclosed Camera

