![Lumenera Corporation logo]

Lu200

USB2 2.0 Megapixel Camera

Outline

Lumenera's Lu200 series of megapixel cameras are designed to be used in a wide variety of applications where high resolution is required. Color camera models currently available (call for monochrome availability).

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. Lu200 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

- ❑ **2.0 Megapixel Sensor**
- ❑ **Color, Progressive Scan**
- ❑ **High speed USB2.0 (480Mbits/sec)**
- ❑ **10 fps at full 1600 x 1200 resolution 40 fps at 800x600 (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**
- ❑ **C-Mount provided**
- ❑ **Direct Show compatible**
- ❑ **USB cameras are software compatible with Windows™ 98 SE, Windows Me, Windows 2K and Windows XP operating systems**
- ❑ **Complete SDK available.**

Image Sensor	**1/2" format, color or mono, 6.7mm x 5.0mm array**
Effective Pixels	**1600 x 1200, 4.2um square pixels**
Frame Rate	**10 fps at 1600x1200, 40 fps at 800x600 (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 +40° C**
Operating Humidity	**20%-80%, Non-condensing**
Interface Connector	**Standard USB**
Lens Mount	**C-Mount**
Frame Buffer	**1 frame buffer (optional expandable to 8 frames)**
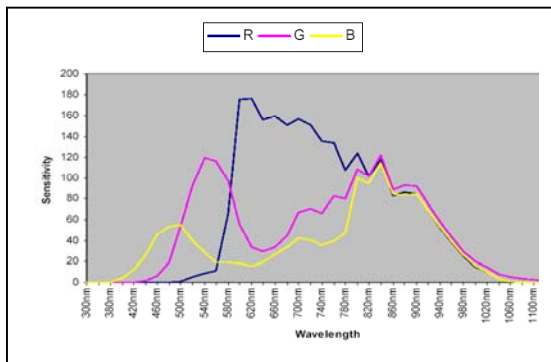
Ordering Information

Lu200M	– Not Yet Available
Lu200C	– Color Camera Module
Lu205M	– Not Yet Available
Lu205C	– Enclosed Color Camera
LuSDK	– Software Developer's Kit

*Full customization available
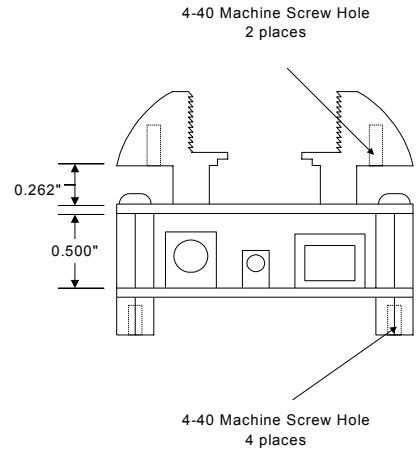to meet your exact needs!*
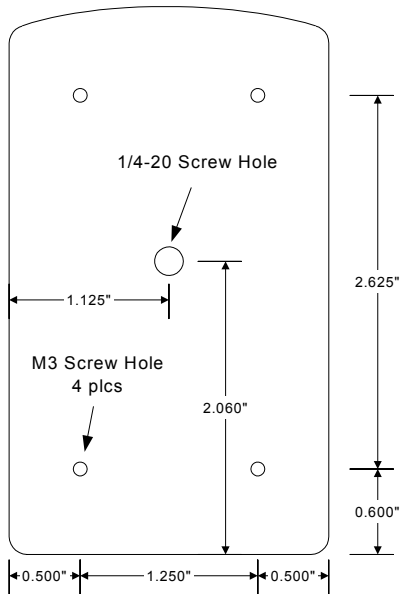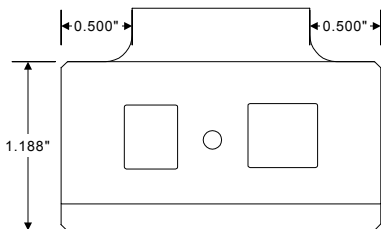
OEM Board-Level Camera

Front

Side

Bottom

2.000"
1.740"
2.500"
1.500"
2.240"
0.085"
0.500"
0.940"
1.440"
Diameter 1.980"

1" 32 TPI C-Mount
1.240"
0.762"
0.625"
1.637"

4-40 Machine Screw Hole 2 places
0.262"
0.500"
4-40 Machine Screw Hole 4 places

Enclosed Camera

Back

Side

Front

1/4-20 Screw Hole
1.125"
M3 Screw Hole 4 plcs
2.625"
2.060"
0.600"
0.500"
1.250"
0.500"

1.250"
1.435"
1.188"
1.563"

3.850"
2.250"

Bottom

0.500"
0.500"
1.188"
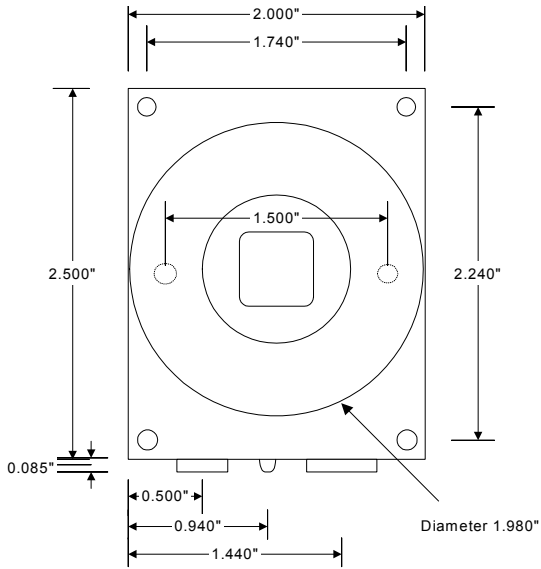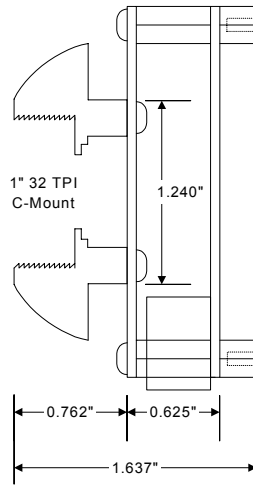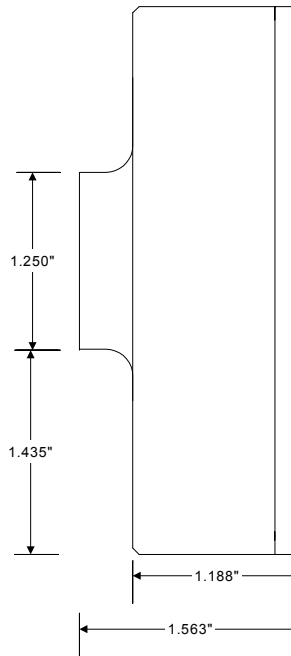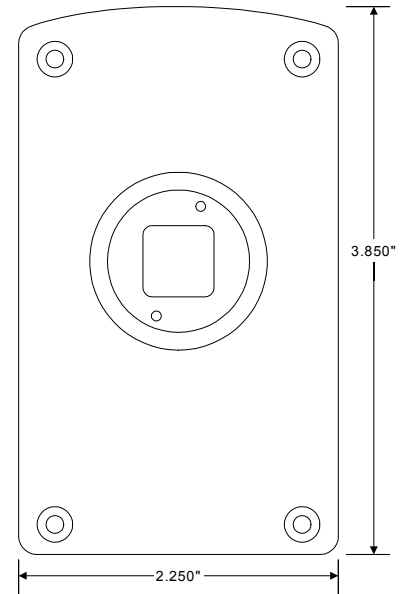
* Anodized aluminum, std color - black