Lumenera corporation

Lu200
Lu205

2.0 Megapixel USB 2.0 Camera

Outline

Lumenera's Lu200 and Lu205 series of megapixel cameras are designed to be used in a wide variety of applications where high resolution is 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. Cameras are offered in both enclosed (Lu205) and board-level form (Lu200). Custom form factor (sizes) can be provided. Color camera models currently 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. Products come with a full one (1) year warranty.

Performance Features

- Color, progressive scan
  2.0 megapixel CMOS sensor

- High-speed USB 2.0 (480Mbits/sec)

- 10 fps at full 1600x1200 resolution
  40 fps at 800x600 (sub-sampled)

- Full sub-window control

- Auto white balance & auto exposure

- Snapshot 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

- DirectShow compatible

- USB cameras are software compatible with
  Windows XP, Windows Vista and Windows
  7, 32 and 64-bit operating systems

- Complete SDK available

Lumenera Corporation • 7 Capella Court, Ottawa ON, Canada K2E 8A7 • (t) 1.613.736.4077 • (f) 1.613.736.4071 • www.lumenera.com

Image Sensor	**1/2" format, color, 6.7mm x 5.0mm array**
Effective Pixels	**1600x1200, 4.2µm square pixels**
Frame Rate	**10 fps at 1600x1200, 40 fps at 800x600 (sub-sampled)**
Sensitivity	**High**
Dynamic Range	**54dB**
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	**~2.5 Watts**
Operating Temperature	**0°C to +50°C**
Operating Humidity	**0% - 95%, Non-condensing**
Interface Connector	**Standard USB**
Lens Mount (Lens not included)	**C-Mount (CS-Mount option)**
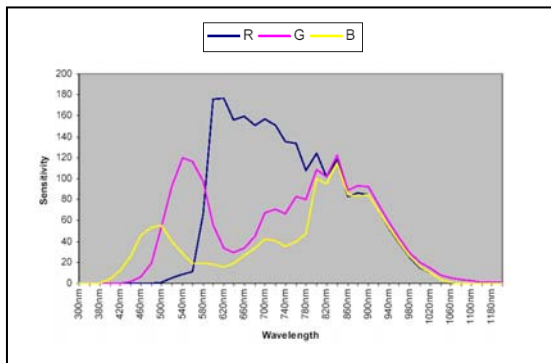
Ordering Information

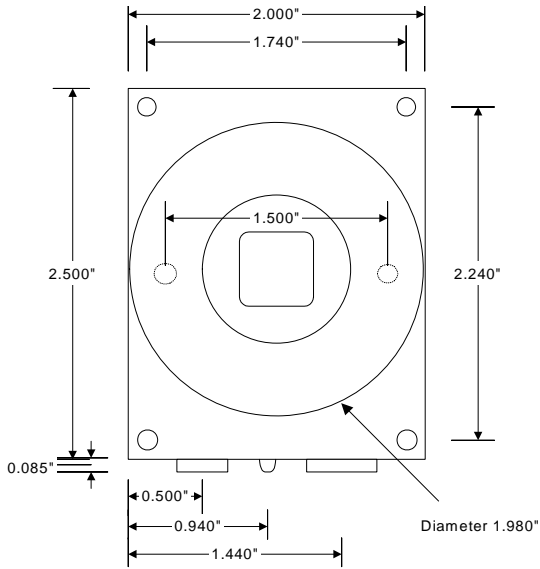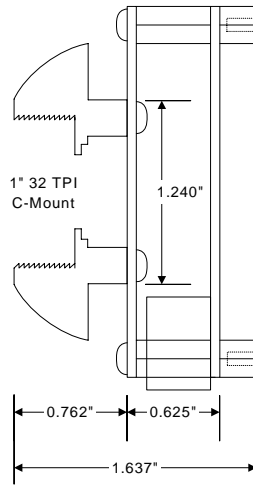|	
Lu200CB	– Color Camera Module
Lu205CB	– Enclosed Color Camera
LuSDK	– Software Developer's Kit

*Full customization
available to meet your
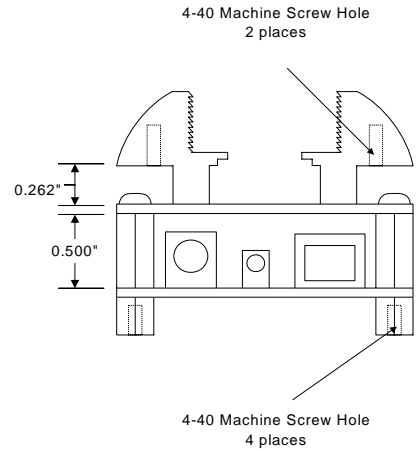exact needs!*

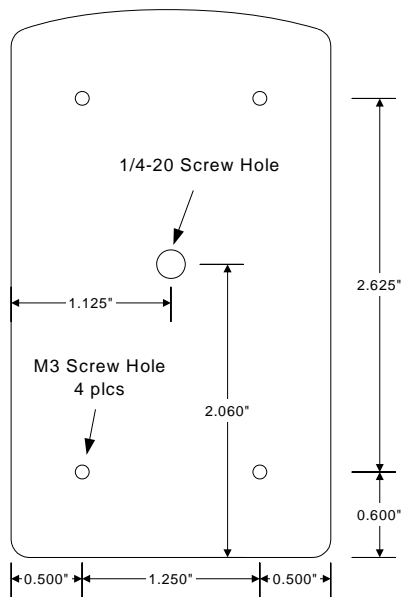# Mechanicals

OEM Board-Level Camera

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

Side — 1" 32 TPI C-Mount, 1.240", 0.762", 0.625", 1.637"

Bottom — 4-40 Machine Screw Hole 2 places, 0.262", 0.500", 4-40 Machine Screw Hole 4 places

Enclosed Camera *

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

Side — 1.250", 1.435", 1.188", 1.563"

Front — 3.850", 2.250"

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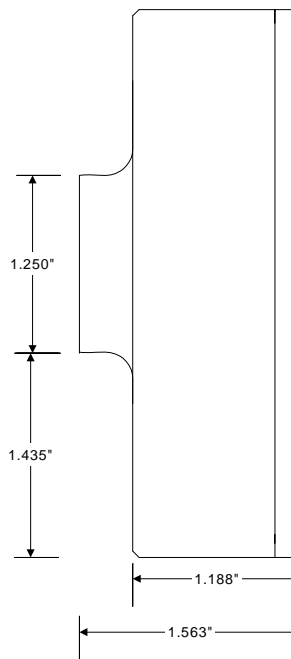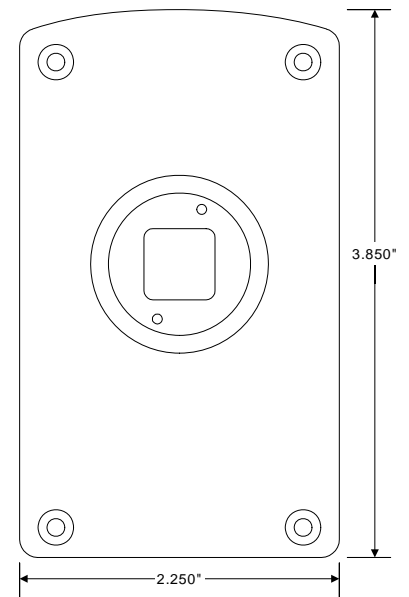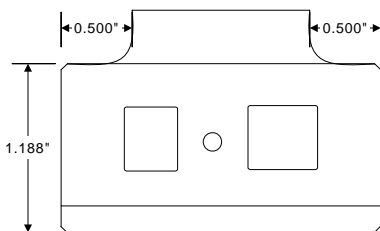
* Anodized aluminum, std color - black