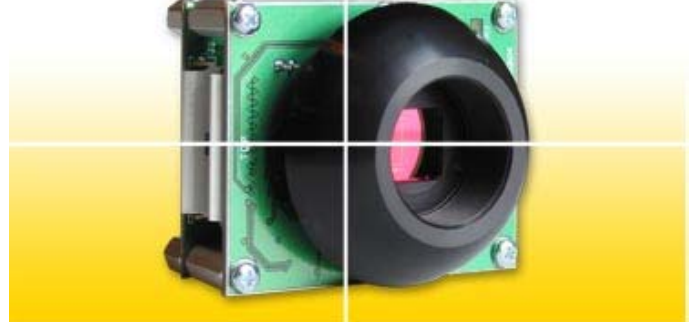# Lumenera corporation

Lu170

1.3 Megapixel USB 2.0 Camera

Outline

Lumenera's Lu170 series of megapixel cameras are designed to be used in a wide variety of applications.

With 1280x1024 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. Lu170 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 or Monochrome, Progressive scan, 1.3 megapixel image sensor**

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

- ❑ **15 fps at full 1280x1024 resolution 60 fps at 640x480 resolution**

- ❑ **Faster frame rates with reduced region of interest**

- ❑ **Auto White Balance**

- ❑ **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™ 98 SE, Windows ME, Windows 2K and Windows XP 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 or mono, 6.6mm x 5.3mm array**
Effective Pixels	**1280 x 1024, 5.2um square pixels**
Frame Rate	**15 fps at 1280x1024, 60fps at 640x480**
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	**~2.5 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)**
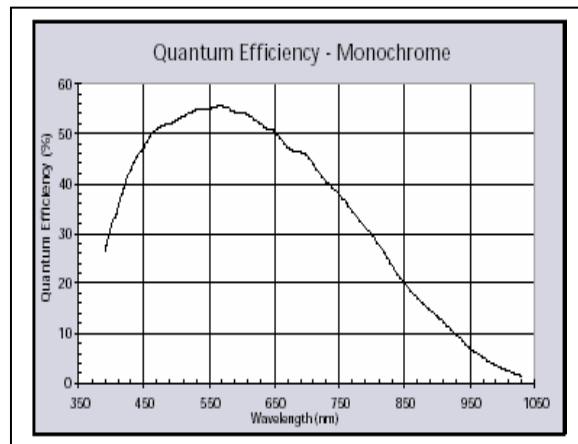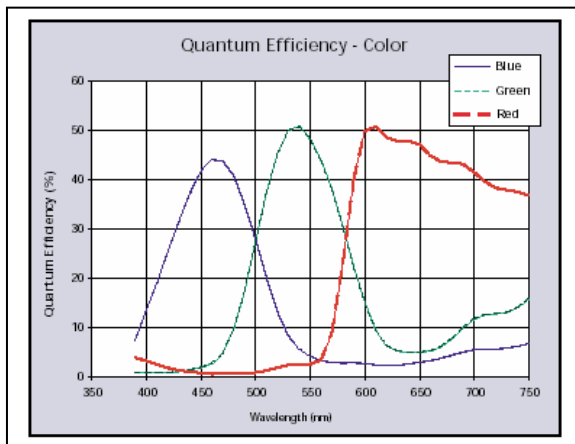
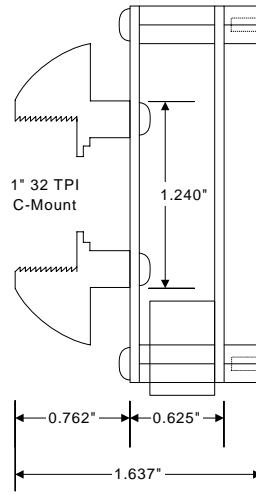## *Full customization available to meet your exact needs!*

Ordering Information

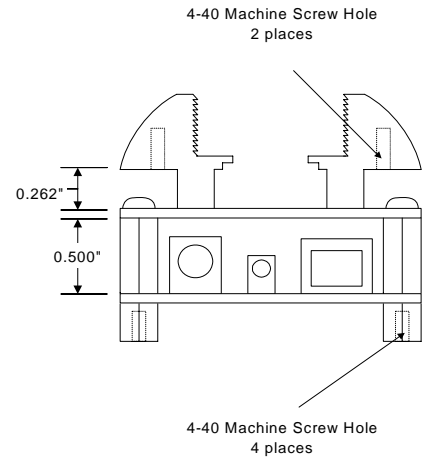|	
Lu170C	- Color Camera Module
Lu170M	- Monochrome Camera Module
Lu175C	- Enclosed Color Camera
Lu175M	- Enclosed Monochrome Camera
LuSDK	- Software Developer's Kit

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OEM Board-Level Camera

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

Front

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

Side

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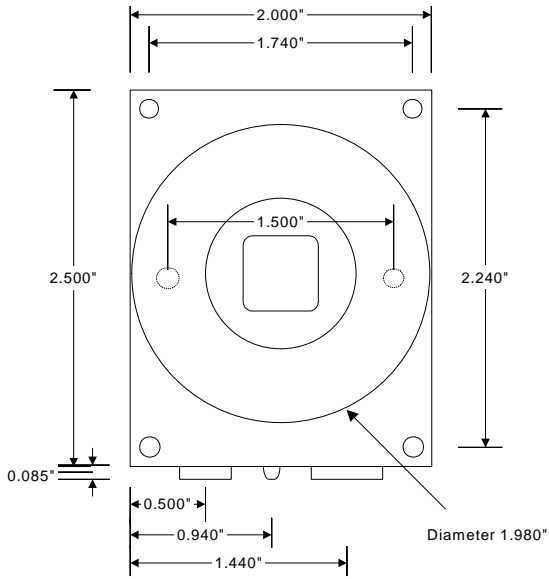
Bottom

Enclosed Camera

Back

1/4-20 Screw Hole
1.125"
M3 Screw Hole
4 plcs
2.625"
2.060"
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"
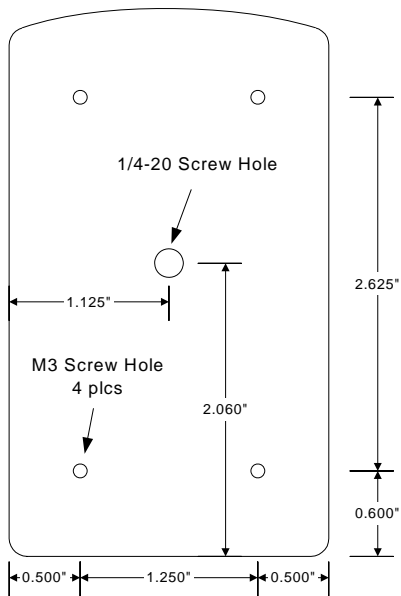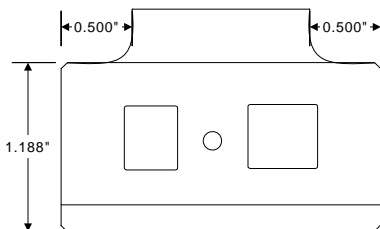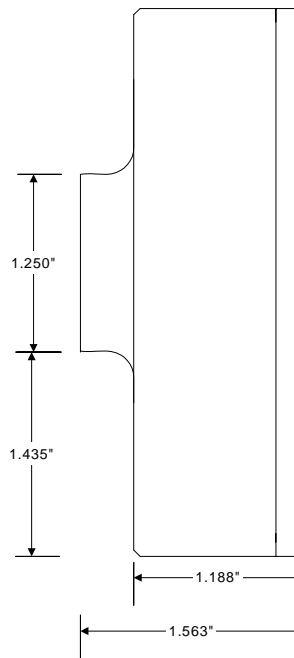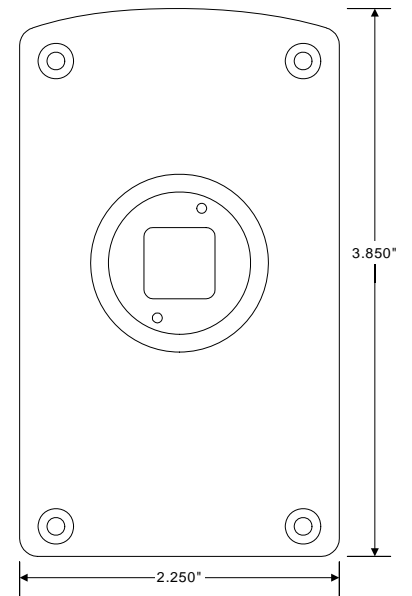
* Anodized aluminum, std color - black

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