Lumenera corporation

Lu370
Lu375

3.1 Megapixel USB 2.0 Camera

Outline

Lumenera's Lu370 and Lu375 series of megapixel cameras are designed to be used in a wide variety of industrial and security applications requiring high resolution and modest cost.

With 2048x1536 resolution and on-board processing these cameras deliver outstanding image quality and value.

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. Enclosed (Lu375), board-level (Lu370), and color variants available. Custom form factor (sizes) can also be provided.

An experienced team of software developers and application engineers supports all Lumenera products. We understand your imaging needs and are here to help you with your integration and development.

Performance Features

❑ **3.1 megapixel, color, progressive scan sensor**

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

❑ **Low noise CMOS technology**

❑ **12 fps at full 2048x1536 resolution
20 fps at 1600x1200 (sub-window)**

❑ **Higher frame rate at lower resolution with 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™ 98 SE, Windows ME, Windows 2K, Windows XP, and Windows Vista operating systems**

❑ **Complete SDK available**

❑ **Full one (1) year warranty**

Image Sensor	**1/2" format, color, 6.5mm x 4.9mm array**
Effective Pixels	**2048 x 1536, 3.2um square pixels**
Frame Rate	**12 fps at 2048x1536, 20 fps at 1024x768 (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	**~3.0 Watts**
Operating Temperature	**0°C to +50°C**
Operating Humidity	**5% - 95%, Non-condensing**
Interface Connector	**Standard USB**
Lens Mount (Lens not included)	**C-Mount (CS-Mount option)**
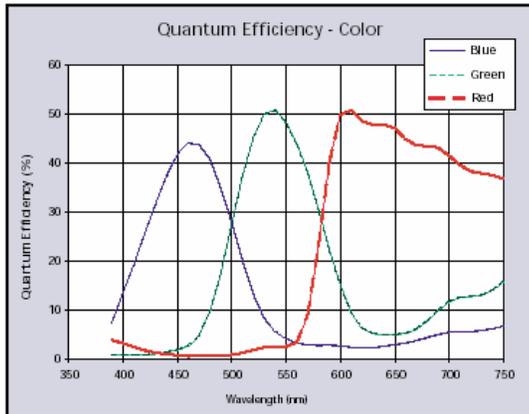
Ordering Information

Lu370C   – Color Camera Module

Lu375C   - Enclosed Color Camera
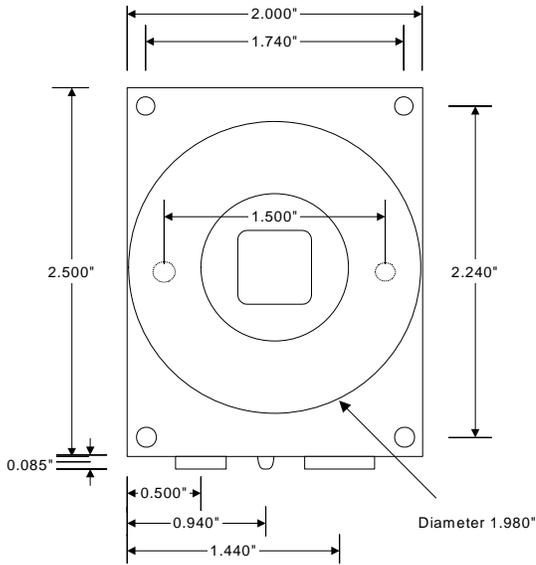
LuSDK   – Software Developer's Kit

Full customization available to meet your exact needs!

Available Options:
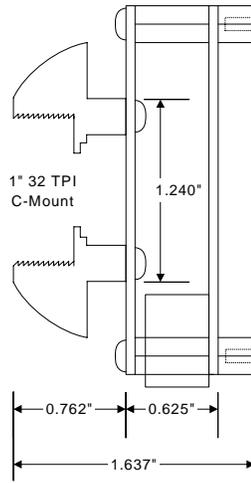Without Standard IR-Cut Filter
Without Glass
Without Mount
Board Level
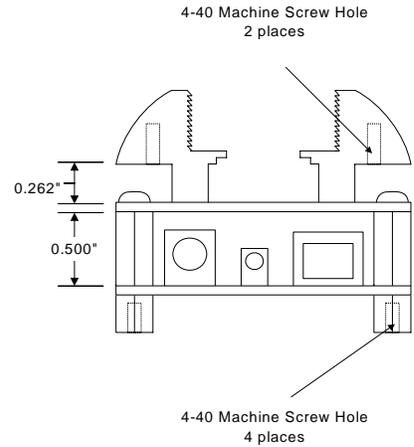Adjustable CS-Mount
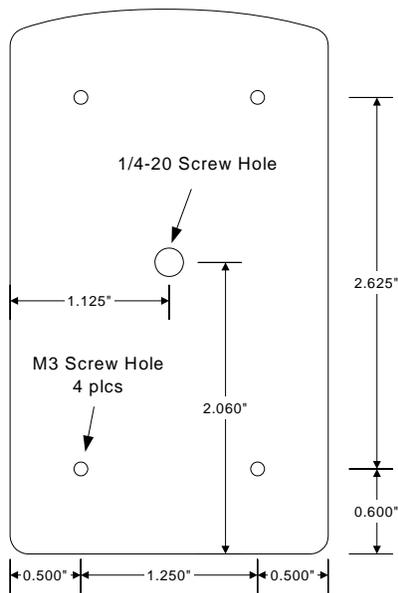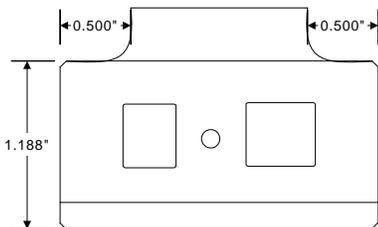
Contact us for more specific details.

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OEM Board-Level Camera

2.000"
1.740"
2.500"
2.240"
1.500"
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
2.060"
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"
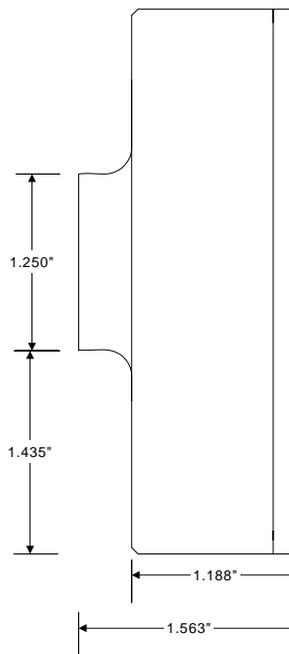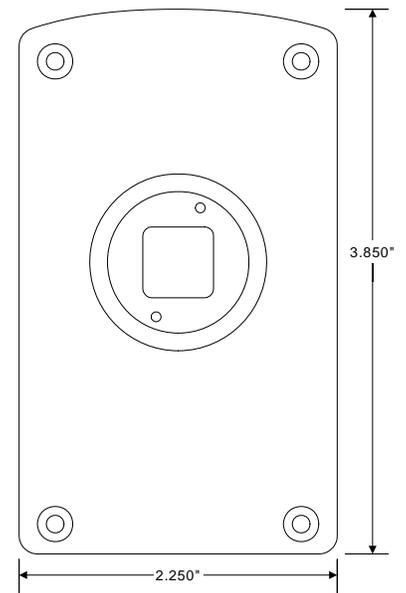
* Anodized aluminum, std color - black