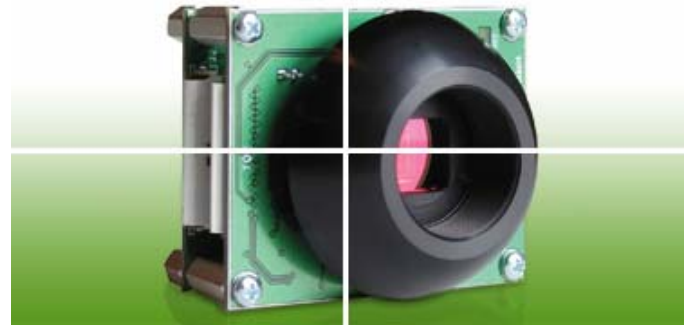
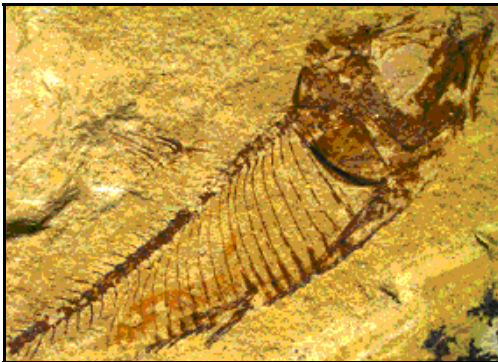


3.1 Megapixel CMOS USB 2.0 Camera



Outline

Lumenera's Lu1370 3.1 megapixel CMOS digital camera is designed to be a cost-effective, versatile solution for documentation and archiving of clinical, life science, material science images where higher resolution is routinely required. With 2048x1536 resolution and on-board processing, the Lu1370 delivers outstanding image quality for a wide variety of scientific OEM applications.



Live video preview provides for real-time focus, while auto exposure and auto white balance efficiently capture your optimal image over a USB 2.0 digital interface. An intuitive user application provides camera controls, while full integration to popular third-party imaging applications is available through our TWAIN drivers. 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.

The USB 2.0 digital interface ensures a simple plug and play installation – and one standard cable minimizes camera clutter. No framegrabber required. The Lu1370 cameras are offered in both enclosed and board-level form. Custom form factor (sizes) can be provided.

Lu1370 is supported by an experienced team of technical support and imaging experts. We understand your imaging needs and are here to help you get the most out of your camera.

Performance Features

- The high-speed USB 2.0 interface eliminates a framegrabber and facilitates ease of installation on both laptop and desktop computers
- The low noise characteristics of the Lu1370 progressive scan 3.1 megapixel image sensor results in crisp color quality for the most demanding brightfield and darkfield microscopy applications including clinical pathology and cytology, life science and geology
- Full color sub-windowing allows for rapid focus and scanning of samples: 10 fps at full 2048X1536 resolution and 60 fps at 640x480 resolution
- Faster frame rates with reduced region of interest
- Select 8 & 10-bit pixel Data modes
- The RGB data captured through each pixel contains 30-bits of color image information resulting in 1024 intensity values
- GPI/O for control of peripherals and synchronization of lighting (4in/4out)
- Camera control through an intuitive user TWAIN interface results in rapid image capture archiving and documentation for high throughput applications, demanding research environments and teaching facilities
- The Lu1370 has a compact design equipped with a C-Mount facilitating installation on all microscope configurations including upright, inverted and stereo
- Lu1370 cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems
- DirectShow compatible
- Complete SDK available

Specifications

Lu1370

Camera Sensor

Image Sensor	1/2" format, CMOS, color, 6.5mm x 4.9mm array
Effective Pixels	2048 x 1536, 3.2um square pixels
Frame Rate	6 fps at 2048x1536, 60 fps at 640x480
Dynamic Range	>60dB
Digital Output	8 and 10-bit uncompressed
Read Noise	20 e- rms

Camera Controls

Mass	300g
Power Requirement	USB bus power, or external 5VDC - 500mA
Power Consumption	~2.5Watts
Operating Temperature	0° C to +50° C
Operating Humidity	5%-95%, Non-condensing
Integration Time	1/1000 to 3 sec.
Shutter	Rolling shutter with single frame capture
ROI	User Selectable
Auto Exposure	Automatic / Manual
White Balance	Automatic / Manual
Gain	Programmable / 1 to 10X optimizable
Interface	USB 2.0 high-speed interface
Dimensions (L x W x H)	3.85 x 2.00 x 2.75 inches
Lens Mount	C-Mount lens adapter

Recommended PC Specs:

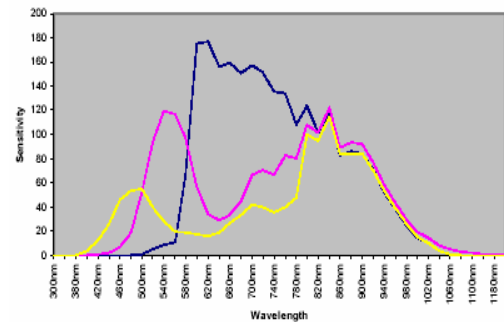
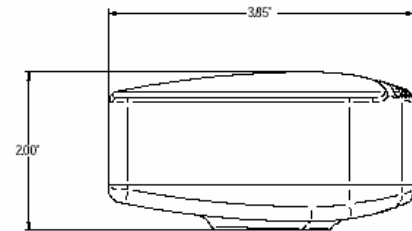
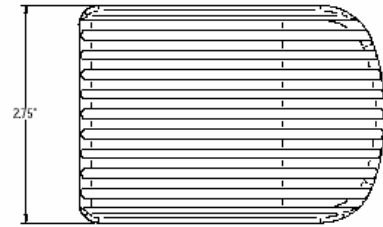
- Pentium 4, 1.3GHz or higher
- 512Mb RAM
- 60 GB hard drive free space or more
- USB 2.0 Port
- Windows 2000 or XP

Minimum PC Specs:

- 600MHz Processor
- 256Mbytes of SDRAM
- 20GB hard drive free space
- USB 2.0 Port
- Windows 98 or ME

Product Includes:

- Lu1370 digital camera for USB 2.0
- CD-ROM with INFINITY user application software
- TWAIN driver
- Documentation
- USB 2.0 cable



Ordering Information

Lu1370C – Color Camera
Lu1370M – Monochrome Camera

Lu1375C – Color Camera
Lu1375M – Monochrome Camera

LuSDK – Software Developers Kit

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