INFINITY lite
1.5 Megapixel CMOS USB 2.0 Camera
Low cost scientific digital camera for documentation in Life Science, Clinical and Material Science Applications

INFINITY lite
The INFINITY lite is specifically designed for the educational market as well as entry level microscopy applications. It is a compact, affordable microscopy camera that delivers outstanding image quality and excellent value. Highlights include live video preview and focus for the efficient capture of optimal images, as well as full integration to popular third-party imaging applications through our TWAIN drivers.

School districts can rest assured that an INFINITY lite camera will place their students at the forefront of digital imaging technology. The imaging skills acquired by students using an INFINITY lite can be directly applied throughout their careers in research, industrial or clinical microscopy.

Excellent Color Reproduction
Years of experience in the microscopy market have allowed Lumenera to develop specialized color algorithms ensuring excellent color reproduction in samples ranging from stained cells to wafer inspection.

INFINITY CAPTURE Software Included
INFINITY CAPTURE, an intuitive image capture program offering camera control, white balance, exposure controls and video production is included. Camera and software are combined to create a complete microscopy imaging solution for your application. INFINITY ANALYZE software is not included, however it can be ordered separately. Contact us for more information and pricing.

USB 2.0 Plug-and-Play Interface
Once the software has been installed, running one or more cameras on a single computer is as simple as plugging them into a high-speed USB 2.0 port.

Third-party Software Integration
INFINITY cameras are integrated into a variety of third-party software packages through direct drivers or with TWAIN/DirectX support.

Superior Technical Assistance Center (TAC)
All cameras are supported by an experienced team of technical support and imaging experts widely acclaimed in the industry. As a customer you gain access to the TAC group and knowledge base, providing full support for cameras, software and microscopy applications.

Recommendations:

• Progressive scan 1.5 megapixel CMOS sensor
• Full color sub-windowing allows for rapid focus and scanning of samples
• Software compatible with Windows XP, Windows Vista and Windows 7, 32 and 64-bits
• Includes TWAIN and DirectX/ Direct Show support
• Two (2) year warranty

Recommended Applications:
All typical entry-level industrial, clinical and life science applications including:
• Teaching labs
• Brightfield/Darkfield
• Histology
• Pathology
• Cytology
• Defect Analysis
• Veterinary Pathology
• Geology
• Histology
• Semiconductor Inspection
• Documentation
• DIC
• Live Cell Imaging
Sensor Specifications

- **Image Sensor**: CMOS, color, progressive scan
- **Optical Format**: 1/2.5"
- **Active Area**: 6.0 x 4.5 mm
- **Pixel Size**: 4.2 x 4.2 µm
- **Resolution**: 1440 x 1080 pixels
- **Region of Interest Control**: Any multiple of 8 x 8 pixels, 32 x 32 pixels minimum

Camera Specifications

- **Frame Rate**: 10 fps
- **Bit Depth**: 8-bits
- **Binning / Subsampling Modes**: 2x subsampling mode
- **Exposure**: Manual and automatic control
- **Exposure Range**: 81 µs to 339 ms (video), 81 µs to 339 ms (snapshot)
- **Gain**: Manual and automatic control
- **Gain Range**: 1 to 7.75 x
- **White Balance**: Manual and automatic control

Camera Characteristics

- **Sensitivity**: 2.2DN/(nJ/cm²) [at 8-bit, 1x gains]
- **Dynamic Range**: 47.5 dB
- **Pixel Well Depth**: 12,600 e-
- **Quantum Efficiency**: 40% (red - peak)
- **Read Noise**: 53 e-
- **Dark Current Noise**: <8 e-/s

Mechanical Specifications

- **Data Interface**: USB 2.0
- **Lens Mount**: C-Mount standard
- **Dimensions**: 2.60 x 1.91 inch
- **Mass**: 245 grams
- **Operating Temperature**: 0 to 50 ºC
- **Storage Temperature**: -30 to 70 ºC
- **Operating Humidity**: 5 to 95%, non-condensing
- **Shock / Vibration**: 50 G shock, 5 G (2-200 Hz) vibration

Camera Software

- **Operating Systems**: Windows XP, Windows Vista, Windows 7, Windows 8, 32 and 64-bits

Power and Emissions

- **Power Consumption**: ~2.5 W
- **Power Requirement**: USB bus power only
- **Emissions Compliances**: FCC Class BE, CE Certified
- **Hazardous Materials**: RoHS, WEEE Compliant

System Requirements

- **Recommended PC Specs**:
  - Pentium 4, 1.3 GHz or higher
  - 512 MB RAM
  - 500 MB hard drive free space or more
  - USB 2.0 Port
  - Windows 7
- **Minimum PC Specs**:
  - 600 MHz Processor
  - 256 MB of SDRAM
  - 200 MB hard drive free space
  - USB 2.0 Port
  - Windows XP

Included In The Box

- INFINITY liteB 1.5 MP USB 2.0 digital camera
- LuINFLTSW-DVD DVD with INFINITY lite user application software, TWAIN driver and documentation
- Lu802 2 m USB 2.0 Cable

Ordering Information

- INFINITY liteB 1.5 megapixel CMOS Camera

Ordering Options

- LuSDK: Software Developer's Kit (Web Download)
- LuSDKSW-DVD: Software Developer's Kit (DVD)
- Lu927: INFINITY ANALYZE Software