

INFINITY^{HD}

1080p60 HD Microscopy Camera

High Definition CMOS Color Camera
with HDMI Output



INFINITY^{HD}

Lumenera's INFINITY^{HD} microscopy camera is a full featured, stand alone, high definition scientific imaging solution offering full 1080p60 preview with superb color reproduction and extremely fast frame rates. Operate the camera by directly connecting to an HDMI monitor without connecting to a PC, or utilize the plug-and-play USB 2.0 for image capture. With extremely fast response times, the INFINITY^{HD} quickly reacts to lighting changes in any life science, clinical or material application.

Superior Color

Years of experience in the microscopy market have allowed Lumenera to develop specialized algorithms ensuring unsurpassed color reproduction. This results in a sample preview on a monitor that closely matches the view on the microscope eyepiece.

Frame Rate

The INFINITY^{HD} camera provides the required 60 fps needed for true high definition, unlike many competitors professing to be HD but offering considerably lower frame rates. This allows for smooth sample manipulation on the preview without any lag.

INFINITY^{HD} Software

The included INFINITY^{HD} software allows for image capture. The software is intuitive and can be set up in minutes. Once the camera is initially installed, the camera can run independently or used via the high-speed USB 2.0 connection.

Superior Technical Assistance Center (TAC)

As a Lumenera customer you gain access to the TAC group and knowledge base, which provide full support for cameras, software and microscopy applications.

Features

- 1/3" (16:9) CMOS 2 megapixel sensor
- 1080p60 high definition format 1920 x 1080
- Direct output to HDMI monitor
- 3 on-camera buttons for power, white balance and capture
- Optional USB 2.0 output to PC
- INFINITY^{HD} software compatible with Windows XP, Vista, Windows 7, 32 and 64-bit, for image capture

Recommended Applications

- Brightfield
- Darkfield
- Live Cell Imaging
- Histology
- Pathology
- Cytology
- Defect Analysis
- Semiconductor Inspection
- Metrology

Warranty

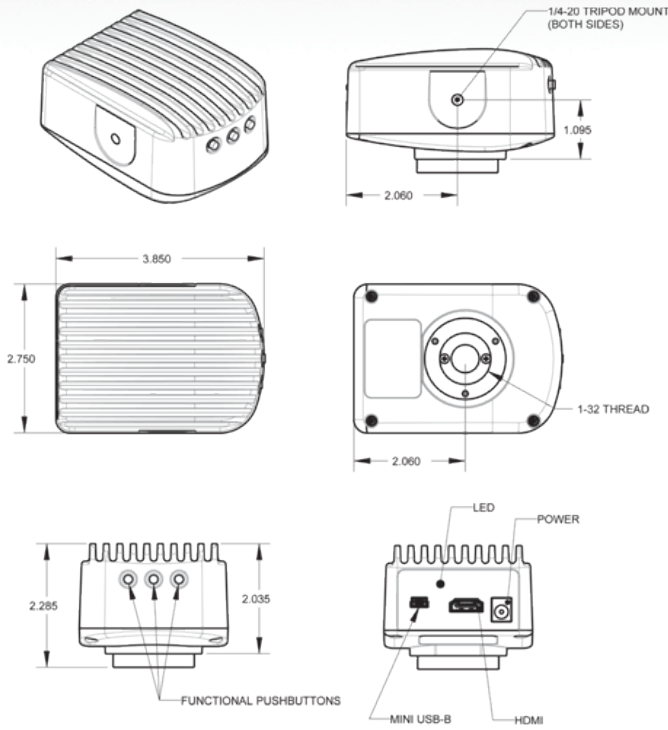
- One (1) year parts and labor

Microscope Coupler

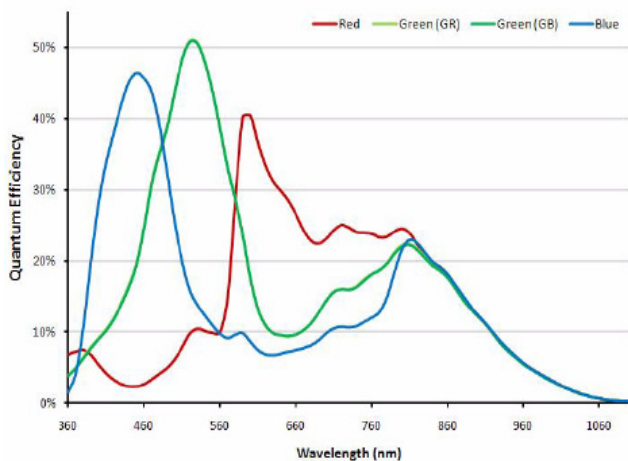
- Requires 0.33 x, 0.4 x or 0.5 x coupler



Mechanical Drawing



Quantum Efficiency



| Sensor Specifications | |
|----------------------------|---|
| Image Sensor | CMOS, color, progressive scan |
| Optical Format | 1/3" |
| Active Area | 5.2 x 2.7 mm |
| Pixel Size | 2.7 x 2.7 μm |
| Resolution | 1920 x 1080 pixels |
| Region of Interest Control | Not applicable to HD |
| Camera Specifications | |
| Frame Rate | 1080p60 (60 fps at full resolution) |
| Bit Depth | 8-bit |
| Binning Modes | Not applicable to HD |
| Exposure Control | Fully automatic control |
| Exposure Range | Not applicable to HD |
| Gain Control | Fully automatic control |
| Gain Range | Not applicable to HD |
| White Balance | One shot automatic control |
| Camera Characteristics | |
| Sensitivity | 11,500 e-/lux/sec |
| Dynamic Range | 65 dB |
| Full Well Capacity | 15,500 e- |
| Quantum Efficiency | 51 % (green peak) |
| Read Noise | 8.7 e- |
| Dark Current Noise | <60 e-/pixel/s at 60 °C |
| Mechanical Specifications | |
| Data Interface | HDMI |
| Control Interface | USB 2.0 |
| Lens Mount | Adjustable C-mount standard |
| Dimensions | 57.15 x 97.79 x 39.62 mm 2.25 x 3.85 x 1.56 inch |
| Mass | 330 g |
| Operating Temperature | 0 to 50 °C |
| Storage Temperature | -30 to 70 °C |
| Operating Humidity | 5 to 95%, non-condensing |
| Shock / Vibration | 50 g shock, 5 g (2 to 200 Hz) vibration |
| Control Software | |
| Operating Systems | Windows XP, Vista, 7, 32 and 64-bit |
| Power and Emissions | |
| Power Consumption | ~2.5 W |
| Power Requirement | External 5 V DC, 500 mA |
| Emissions Compliances | FCC Class B, CE Certified |
| Hazardous Materials | RoHS, WEEE Compliant |
| Warranty | One (1) year |
| System Requirements | |
| Recommended PC Specs: | <ul style="list-style-type: none"> • 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: | <ul style="list-style-type: none"> • 600 MHz Processor • 256 MB of SDRAM • 200 MB hard drive free space • USB 2.0 Port • Windows XP |
| Included In The Box | |
| INFINITYHD | 2 MP Digital Camera for USB 2.0 |
| LuINFHDSW-DVD | DVD with INFINITYHD user application software and documentation |
| La2020HD | 2 m HDMI cable |
| La2030M | 3 m USB 2.0 A - mini B cable |
| La20515 | 5 V DC, 2.5 A, 12.5 W power supply |
| Ordering Information | |
| INFINITYHD | 2 MP HD Color Camera |

