









# LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps)

**LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps)** is a camera that can take picture, take videos and make measurements. It also have a good resolution and color.

LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) is a 1080P scientific grade digital camera that has ultra superior color reproduction and super fast frame speed. LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) can be connected to a LCD monitor or HD TV via HDMI cable and operated independently without connecting to PC. The image/video capture and operate can be controlled by mouse, so no shaking when you take images and videos. It also can be connected to a PC via USB2.0 cable and operate with the software. With fast frame speed and short responding time features, LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) can be used in many areas like microscopy imaging, machine vision and similar image processing fields.



### LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps)

#### **APPLICATION**

LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps)can be widely used in video conferencing, remote medical diagnosis, microscopy images, industrial inspection, video projectors, security monitoring field. With the high image quality and easy to operate features, it will be your best assistant for following applications:

- Live Cell Imaging
- Surgical Microscopic Imaging
- Pathology
- Cytology
- Defect Analysis
- Semiconductor Inspection
- Metrology
- Navigation for Processed Imaging
- · Industrial Optical HD Digital Imaging
- Astronomical Observation



#### **FEATURES**

#### 1. Built- in mouse control Camera.

The significant innovation of LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) is making the software implant inside the camera. This forward thinking feature liberates users from cumbersome computers and annoying buttons. You can control the camera by only a mouse directly.

#### 2. Record image and video to SD card.

Record high definition images and videos at 30fps/1080P into the inserted SD card directly.

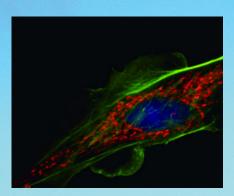


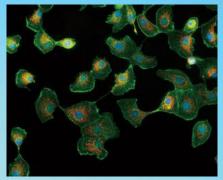
#### 3. High frame rate upto 60fps.

With 60fps preview frame rate at resolution 1920x1080 when it is connected via HDMI interface, LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) creates a miracle. It is one of the fastest USB2.0 cameras in the world.

#### 4. HDMI Fluorescent imaging Capability.

Taking advantage of the ultra high signal-to-noise ratio sensor, LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) allows you to set up to 10 seconds exposure time. So it can be used with fluorescent microscopes.





#### 5. The functions inside camera (Cloud 1.0)

#### (1) Simple to operate.

The implanted software is very simple to operate. There are only the icons on the software starting screen, one for capture, the other one for setting menu.

#### (2) Set Exposure Time Capability.

Based on the auto exposure, the first time, HDMI camera also have a full control of the exposure time and gain. It allows to set the exposure time from 1ms to up to 10 seconds and adjusts 20 scales of Gain value.



#### (3) 3D Noise Reduction.

The extension of the exposure increases the image noise. But the integrated 3D noise reduction function keeps the LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) image always clean and sharp. The following comparison images show the amazing 3D noise reduction effect.



Original image

After 3D noise reduction

#### (4) 1080P Video Recording.

Just click " are to start recording 1080P videos at 30fps. The recorded video files will be saved to the high speed SD card directly. It is also allowed to play back the videos in the SD card directly.

#### (5) Get more Details with ROI Magnification Function.

A series image operation buttons on the right side of the screen allow to do the image flip, rotation and zoom. Zoom function can help you get more image details with a magnified image.

#### (6) Image Comparison Function.

The image comparison function is available in the setting menu. You can choose one image, even move the image position or select the ROI area to compare with the live images.



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#### (7) Browse Captured Images.

All the captured images are saved in the SD card. The users can browse all the images in the SD card, zoom in images or delete unnecessary images. You also can review and play back the video files in the SD card directly.

#### (8) Measurement function when it is connected to LCD monitor.

When the camera is connected to PC, it is controlled by the software and has complete measurement and image analysis function. When it is connected to LCD monitor, LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) has simple measurement function, only can measure line length. LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps) has complete measurement function when it is connected to LCD monitor. Please see the following picture to know more about the measurement function of LC-16 HDMI 1080P High Resolution Digital Camera (6.0MP, 30fps).





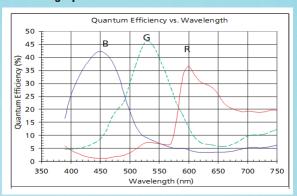
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#### (9) PC software.

Want to have a software with more powerful functions? Connect the camera to the PC via the USB2.0 port, the camera support Win XP, win7/8, 32/64bit, MAC OSX operation system, driver free. The frame rate is 30fps(with 1080P resolution) when it is connected to PC. The application software ISCapture, which integrate the remarkable functions like live and still image measurement, focus stacking and image stitching etc., can fully control the camera. We keep a copy of ISCapture in the SD card come with the camera.



#### **Characteristic Curve of Photographic Transmission**





## **Specification**

Model LC-16 HDMI 1080P High Resolution Digital

Camera (6.0MP, 30fps)

Image Sensor Colorful Sony IMX236 CMOS Sensor

Chip Size 1/2.8"

Pixel Size  $2.8 \text{um} \times 2.8 \text{um}$  Video Resolution  $1920 \times 1080$ 

Captured Image Resolution 3264  $\times$  1840 on SD card to LCD monitor,

 $1920 \times 1080$  and  $3264 \times 1840$  with software

to PC

Preview Frame Rate  $1920 \times 1080 \ 30 \text{fps}$  via USB2.0

 $1920 \times 1080 60$ fps via HDMI

Data Record High speed SD Card (8G)
Video Record 1080p 30fps @ SD Card

1080p 30fps @ PC

Scan Mode Progressive

Electronic Shutter Electronic Rolling Shutter

A/D conversion 8 bit
Color Depth 24bit
Sensitivity 510mV
Dynamic Range 68dB
S/N ratio 52dB

Exposure time  $0.001 \sec \sim 10.0 \sec$ Exposure Automatic & Manual

White balance Automatic

Settings Gain, Gamma, Saturation, Contrast, scale bar

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Measurement Function when connected to LCD Monitor

function

Complete measurement function, including Anchor Point, Line, Freehand Line, Rectangle, Circle, Polygon, Point-line Distance, Concentric Circles, Bicircle, Angle etc.

PC software ISCapture
Output model 1 USB2.0
Output model 2 HDMI

System Compatible Windows XP/Vista/Win 7/8(32 and 64-bit ),

MAC OSX

Optical port C- Mount
Power Supply DC 12V /2A
Working Temperature 0-60°C

Humidity 45%-85% Storage Temperature -20-70°C

Dimension & Weight 78\*70.8\*90.7mm, 1kg



### **Sample Images**







