

## BHC3E-1080P HDMI Digital Camera



### Introduction

BHC3E-1080P HDMI Microscope Camera is a 1080P economic HDMI digital camera. BHC3E-1080P 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 Capture2.0 software.

### Feature

#### 1. Use mouse to control the Camera.

When the camera is connected to LCD monitor or HD TV, you can control the camera by only a mouse, it is easy to operate and no shaking.

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

Record high definition images and videos at 15fps@1080P into the inserted SD card directly.

#### 3. High frame rate of 15fps.

BHC3E-1080P can transfer uncompressed data of resolution 1920x1080 to LCD monitor or PC at 15fps speed. The camera support Win XP, Win7/8/10, 32/64bit, MAC OSX , driver free.

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

(1) The less icons the better.

The implanted software is very simple to operate. There are only 2 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. The integrated 3D noise reduction function keeps the images 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.

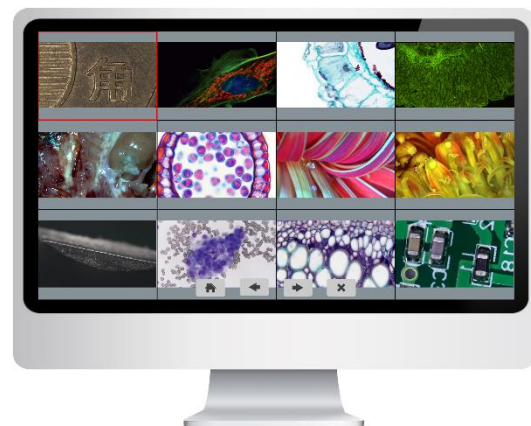
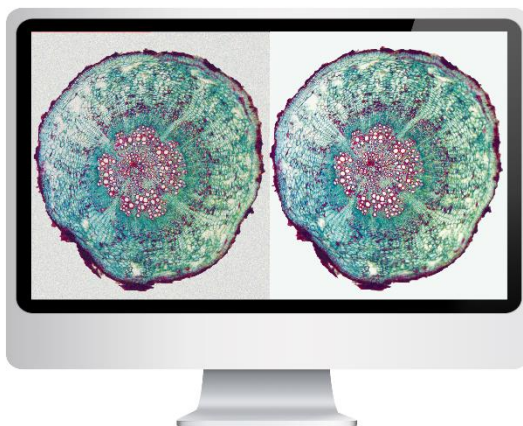
Just click “” to start recording 1080P videos at 15fps. The recorded video files will be saved to the high speed SD card directly. It is also allowed to play back the videos in the SD card directly.

(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 ROI. ROI 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.



(7) Browse Captured Images and videos.

All the captured images and videos are saved in the SD card. 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) PC software.

Want to have a software with more powerful functions? Connect the BHC3E-1080P to the PC via the USB2.0 port, you can have a USB driver free camera immediately. The application software Capture2.0, which integrate the remarkable functions like live and still image measurement, image stacking and image stitching etc., can fully control the BHC3E-1080P. We keep a copy of Capture2.0 in the SD card come with the BHC3E-1080P.

## Application

BHC3E-1080P can be used in many areas like microscopy imaging, machine vision and similar image processing fields, such as: Live Cell Imaging, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Navigation for Processed Imaging, Industrial Optical HD Digital Imaging.

## Specification

Image Sensor	CMOS, Aptina MT9P031
Sensor Size	1/2.5"
Pixel Size	2.2um × 2.2um
Video Resolution	1920 × 1080
Capture Resolution	2592 × 1944
Frame Rate	1920 × 1080 15fps via USB2.0 1920 × 1080 15fps via HDMI
Data Record	SD Card (4G)
Video Record	1080p 15fps @ SD Card 1080p 15fps @ PC
Scan Mode	Progressive
Electronic Shutter	Electronic Rolling Shutter
A/D conversion	8 bit
Color Depth	24bit
Dynamic Range	60dB
S/N ratio	40.5dB
Exposure time	0.001 sec ~ 10.0 sec
Exposure	Automatic & Manual
White balance	Automatic
Settings	Gain, Gamma, Saturation, Contrast
Built- in software	Cloud 1.0 version
PC software	Capture2.0
Output model 1	USB2.0
Output model 2	HDMI
System Compatible	Windows XP/Vista/Win 7/Win 8/Win 10(32 and 64-bit ), MAC OSX
Optical port	C- Mount
Power Supply	DC 12V /2A
Operational Temperature	0°C~60°C
Humidity	45%-85%
Storage Temperature	-20°C~70°C
Dimension & Weight	74.4*67.2*90.9mm, 0.8kg

## Sample Image

