



LABOMED, INC.



LC-10 1080P/Sony IMX236 1/2.8"(5.38x3.02) C-mount HDMI+USB CMOS Camera

LC-10 1080P/Sony IMX236 1/2.8"(5.38x3.02) C-mount HDMI+USB CMOS Camera is a multiple interfaces (HDMI+USB2.0+SD card) CMOS camera and it adopts ultra-high performance Sony IMX236 CMOS sensor as the image capture device. HDMI+USB2.0 are used as the data transfer interface to HDMI display or computer.

For HDMI output, The XCamView will be loaded and a camera control panel and toolbar are overlaid on the HDMI screen, in this case, the USB mouse can be used to set the camera, browse and compare the captured image, play the video etc.

For USB2.0 output, unplug the mouse and plug in the USB2.0 cable to the camera and computer, then the video stream can be transfer to computer with the advanced software ImageView. With ImageView, you can control the camera, process the image as other USB series camera.



LABOMED, INC.

APPLICATION

The possible applications of **LC-10 1080P/ Sony IMX236 1/2.8" (5.38x3.02) C-mount HDMI+USB CMOS Camera** are as follows:

1. Scientific research, education (teaching, demonstration and academic exchanges);
2. Digital laboratory, medical research;
3. Industrial visual (PCB examination, IC quality control);
4. Medical treatment (pathological observation);
5. Food (microbial colony observation and counting);
6. Aerospace, military (high sophisticated weapons).



FEATURES

The **LC-10 1080P/Sony IMX236 1/2.8" (5.38x3.02) C-mount HDMI+USB CMOS Camera's** basic characteristic is as follows:

1. All in 1 (HDMI+USB+SD card) C-mount camera with Sony high sensitivity CMOS sensor;
2. Simultaneous HDMI & USB output;
3. CNC precision machining shell;



LABOMED, INC.

4. Built-in mouse control;
5. Built-in image capture & video record to SD card;
6. Built-in camera control panel, including exposure(manual/auto)/gain, white balance(lockable), color adjustment, sharpness and denoising control;
7. Built-in toolbar including zoom, mirror, comparison, freeze, cross, browser functions;
8. Built-in image & video browsing, display & play;
9. Ultra-Fine color engine with perfect color reproduction capability(USB);
10. With advanced video & image processing application ImageView, which including professional image processing such as 2D measurement, HDR, image stitching, EDF(Extended Depth of Focus), image segmentation & count, image stacking, color composite and denoising(USB);
11. Support standard UVC for Windows/Linux/Mac(USB).

SPECIFICATION

Model	LC-10
Sensor & Size(mm)	1080P/Sony IMX236 1/2.8"(5.38x3.02)
Pixel(μm)	2.8x2.8
G Sensitivity	510 mv with 1/30s
Dark Signal	0.15mv with 1/30s
FPS/Resolution	60@1920X1080P(HDMI) 30@1920X1080(USB)
Binning	1x1
Exposure	0.1ms~999ms



LABOMED, INC.

Interface & Button Functions

USB	USB Camera or USB Mouse
HDMI	HDMI Out
DC12V	12V Power in
SD	SD Card Slot
ON/OFF	Power On/off Switch

Other Specification for HDMI Output

UI Operation	With USB Mouse
Image Capture	High Speed in SD Card(8G)
Video Record	1080P 30fps in SD Card(8G)
Camera Control Panel	Including Exposure, Gain, White Balance, Color Adjustment, Sharpness and Denoising Control
Toolbar	Including Zoom, Mirror, Comparison, Freeze, Cross, Browser Function

Other Specification for USB Output

White Balance	Auto White Balance
Color Technique	Ultra-Fine™ Color Engine (USB)
Capture/Control API	Standard UVC for Windows/Linux/Mac(USB)
Recording System	Still Picture or Movie (USB)

Software Environment (for USB2.0 Connection)

Operating System	Microsoft® Windows® XP / Vista / 7 / 8 / 8.1 /10(32 & 64 bit) OSx(Mac OS X) Linux
------------------	---

PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher Memory: 4GB or More USB Port:USB2.0 High-speed Port Display: 19" or Larger CD-ROM
-----------------	--

Operating Environment

Operating Temperature(in Centidegree)	-10~ 50
Storage Temperature(in Centidegree)	-20~ 60
Operating Humidity	30~80%RH



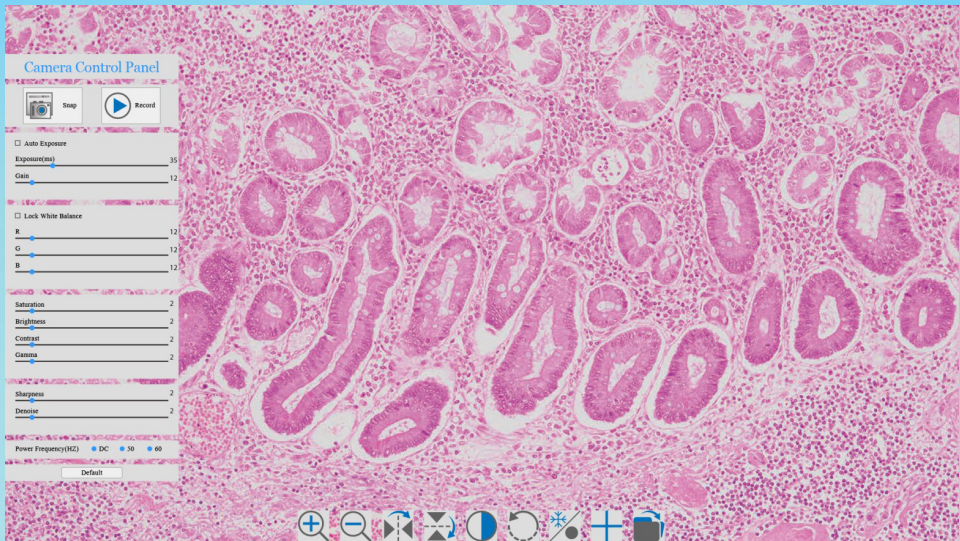
LABOMED, INC.

Storage Humidity
Power Supply

10~60%RH
DC 12V/1A Adapter
(in Centidegree)

Operating Humidity
Storage Humidity
Power Supply

30~80%RH
10~60%RH
DC 12V/1A Adapter



XCamView UI for Mouse Control



LABOMED, INC.

DIMENSION



PACKING INFORMATION





LABOMED, INC.

Standard Packing List

- A Gift box : L:25.5cm W:17.0cm H:19.0cm (1pcs, 1.55kg/ box)
- B LC-10 camera
- C Power Adapter: Input: AC 100~240V 50Hz/60Hz, Output: DC 12V 1A

American standard: Model: GS12U12-P1I 12W/12V/1A: UL/CUL/BSMI/CB/FCC
EMI Standard:EN55022,EN61204-3, EN61000-3-2,-3, FCC Part 152 class B, BSMI
CNS14338

EMS Standard:EN61000-4-2,3,4,5,6,8,11,EN61204-3,Class A Light Industry
Standard

European standard:Model:GS12E12-P1I 12W/12V/1A; TUV(GS)/CB/CE/ROHS
EMI Standard:EN55022,EN61204-3, EN61000-3-2,-3, FCC Part 152 class B,
BSMI CNS14338

EMS Standard:EN61000-4-2,3,4,5,6,8,11,EN61204-3,Class A Light Industry
Standard

- D HDMI Cable
- E USB Mouse
- F High-speed USB2.0 A male to A male gold-plated connectors cable /2.0m
- G CD (Driver & utilities software, Ø12cm)

Optional Accessory

- H Adjustable lens adapter
 - C-Mount to Dia.23.2mm Eyepiece Tube
 - (Please choose 1 of them for your microscope)
- I Fixed lens Adapter
 - C-Mount to Dia.23.2mm Eyepiece Tube
 - (Please choose 1 of them for your microscope)

Note: For H and I optional items, please specify your camera type(C-mount, microscope camera), our engineer will help you to determine the right microscope camera adapter for your application.



LABOMED, INC.

- J 108015(Dia.23.2mm to 30.0mm Ring)/Adapter rings for 30mm eyepiece tube
- K 108016(Dia.23.2mm to 30.5mm Ring)/ Adapter rings for 30.5mm eyepiece tube
- L Calibration kit 106011/TS-M1(X=0.01mm/100Div.);
106012/TS-M2(X,Y=0.01mm/100Div.);
106013/TS-M7(X=0.01mm/100Div., 0.10mm/100Div.)
- M SD Card(4G or 8G)