# LABOMED INC.

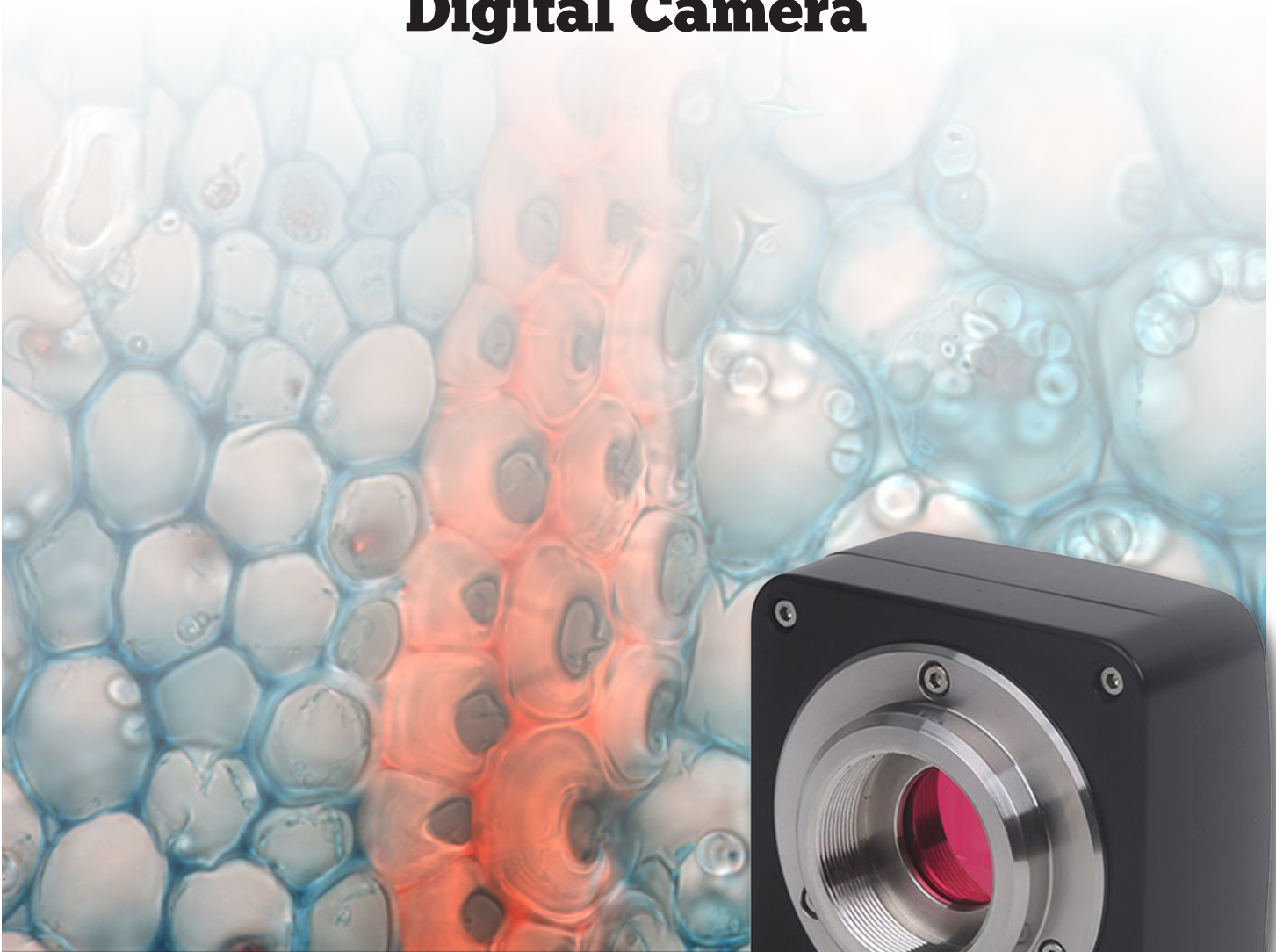# LC-37

## 5.1MP USB2.0 CMOS Microscope Digital Camera

# LC-37 - 5.1MP USB2.0 CMOS Microscope Digital Camera

**LC-37 - 5.1MP USB2.0 CMOS Microscope Digital Camera** adopts ultra-high performance CMOS sensor as the image-capture device. USB2.0 is used as the data transfer interface.

**LC-37 - 5.1MP USB2.0 CMOS Microscope Digital Camera** hardware resolution is 5.1MP and comes with the zinc aluminum alloy compact housing.

**LC-37 - 5.1MP USB2.0 CMOS Microscope Digital Camera** comes with advanced video & image processing application ImageView; Providing Windows/Linux/OSX multiple platform SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API; The **LC-37 - 5.1MP USB2.0 CMOS Microscope Digital Camera** can be widely used in bright field light environment and microscope image capture and analysis with moderate frame rate.

## FEATURES

The basic features of LC-37 cameras are as follows:

1. Standard C-Mount with Aptina CMOS sensor;
2. With hardware resolution is 5.1M;
3. Durable zinc aluminum alloy housing;
4. USB2.0 interface ensuring high speed data transmission;
5. Ultra-FineTM color engine with perfect color reproduction capability;
6. With advanced video & image processing application ImageView;
7. Providing Windows/Linux/Mac OS multiple platforms SDK;
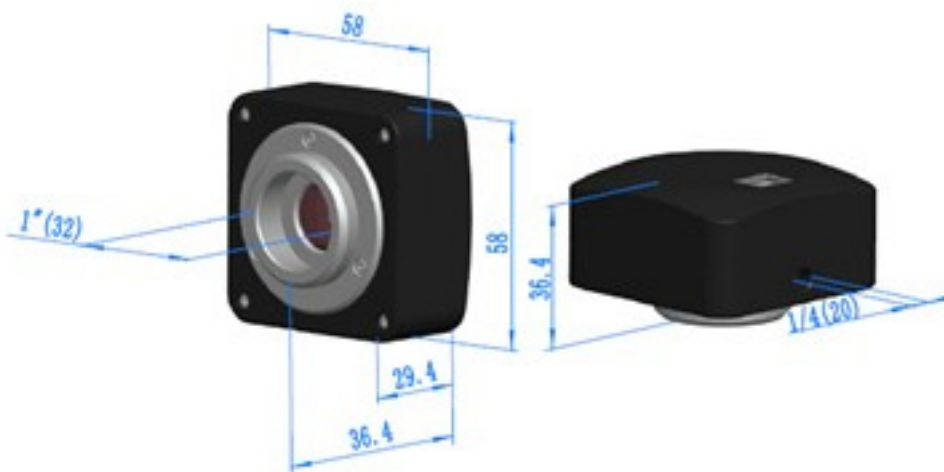8. Native C/C++, C#/VB.NET, DirectShow, Twain Control API.

## SPECIFICATION

| Model | LC-37 |
|---|---|
| Sensor & Size(mm) | 5.1M/MT9P001© 1/2.5" (5.7x4.28) |
| Pixel(μm) | 2.2x2.2 |
| G Responsivity | 0.53 V/lux-sec |
| Dynamic range | 66.5dB |
| SNRmax | 40.5dB |
| FPS/Resolution | 5@2592x1944 18@1280x960 60@640x480 |
| Binning | 1x1, 2x2, 4x4 |
| Exposure | 0.294ms~2000ms |
| | |
| **Other Specification for LC-37** | |
| Spectral Range | 380-650nm (with IR-cut Filter) |
| White Balance | ROI White Balance/ Manual Temp Tint Adjustment/NA for Monochromatic Sensor |

| Color Technique | Ultra-FineTM Color Engine/NA for Mono-chromatic Sensor |
| --- | --- |
| Capture/Control API | Native C/C++, C#/VB.NET, DirectShow, Twain and Labview |
| Recording System | Still Picture and Movie |
| Cooling System* | Natural |
| Operating Environment | |
| Operating Temperature (in Centigrade) | -10~ 50 |
| Storage Temperature (in Centigrade) | -20~ 60 |
| Operating Humidity | 30~80%RH |
| Storage Humidity | 10~60%RH |
| Power Supply | DC 5V over PC USB Port |
| Software Environment | |
| Operating System | Microsoft® Windows® XP / Vista / 7 / 8 /10 (32 & 64 bit) |
| | OSx(Mac OS X) |
| | Linux |
| PC Requirements | CPU: Equal to Intel Core2 2.8GHz or Higher |
| | Memory:2GB or More |

**DIMENSION**

**The LC-37 - 5.1MP USB2.0 CMOS Microscope Digital Camera** body, made from tough, zinc alloy, ensures a heavy duty, workhorse solution. The camera is designed with a high quality IR-CUT to protect the camera sensor. No moving parts included. These measures ensure a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.

**PACKING INFORMATION**

| Standard Camera Packing List | | |
|---|---|---|
| A | Carton L:52cm W:32cm H:33cm (20pcs, 12~17Kg/ carton), not shown in the photo | |
| B | Gift box L:15cm W:15cm H:10cm (0.5~0.55Kg/ box) | |
| C | LC-37 USB2.0 C-mount CMOS camera | |
| D | High-speed USB2.0 A male to B male gold-plated connectors cable /2.0m | |
| E | CD (Driver & utilities software, Ø12cm) | |
| Optional Accessory | | |
| F | Adjustable lens adapter | C-mount to Dia.23.2mm eyepiece tube |
| | | (Please choose 1 of them for your microscope) |
| | | C-mount to Dia.31.75mm eyepiece tube |
| | | (Please choose 1 of them for your telescope) |
| G | Fixed lens adapter | C-mount to Dia.23.2mm eyepiece tube |
| | | (Please choose 1 of them for your microscope) |
| | | C-mount to Dia.31.75mm eyepiece tube |
| | | (Please choose 1 of them for your telescope) |
| | Note: For F and G optional items, please specify your camera type (C-mount, microscope camera or telescope camera), engineer will help you to determine the right microscope or telescope camera adapter for your application; | |
| H | 108015(Dia.23.2mm to 30.0mm Ring)/adapter rings for 30mm eyepiece tube | |
| I | 108016(Dia.23.2mm to 30.5mm Ring)/ adapter rings for 30.5mm eyepiece tube | |
| J | 108017(Dia.23.2mm to 31.75mm Ring)/ adapter rings for 31.75mm eyepiece tube | |
| K | 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.) |

**EXTENSION**

| Extension | Picture | |
|---|---|---|
| C-mount Camera |  | Machine vision; Medical imaging; |
| | | Semiconductor equipment; Test instruments; |
| | | Document scanners; 2D barcode readers; |
| | | Web camera and security video; |
| | | Microscope imaging; |
| Microscope Camera |  | |

(23.2mm Adapter) (23.2mm Adapter)

(31.75mm Adapter) (31.75mm Adapter)