





# LC-23 6.0M/ICX695AQG(C) 1" (12.48x9.99) TE-Cooling C-mount USB3.0 CCD Camera

LC-23 6.0M/ICX695AQG(C) 1" (12.48x9.99) TE-Cooling C-mount USB3.0 CCD Camera adopts Sony Exview HAD CCD II sensor as the image capture device with two-stage peltier cooling imaging chip to -50 degree below ambient. This will greatly increase the signal to noise ratio and decrease the image noise. Smart structure is designed to assure the heat radiation efficiency and avoid the moisture problem. Electric fan is used to increase the heat radiation speed.

USB3.0 is used as the data transfer interface to increase the frame rate.

**LC-23 6.0M/ICX695AQG(C) 1" (12.48x9.99) TE-Cooling C-mount USB3.0 CCD 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.



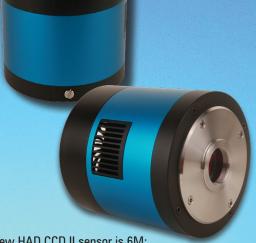
## LABOMED, INC.

### **APPLICATION**

The LC-23 6.0M/ICX695AQG(C) 1" (12.48x9.99) TE-Cooling C-mount USB3.0 CCD Camera can be widely used in low light environment and microscope fluorescence image capture and analysis, as well as the astronomy application.

#### **FEATURES**

The basic characteristic of LC-23 6.0M/ICX695AQG(C) 1" (12.48x9.99) TE-Cooling C-mount USB3.0 CCD Camera can be summarized as follows:



- Standard C-Mount camera with SONY ExView HAD CCD II sensor is 6M;
- 2. Two-stage TE-cooling with controllable electric fan;
- 3. Image chip cooling up to 50°C below ambient;
- 4. Working temperature can be regulated to specified temperature in 5 minutes;
- 5. Smart structure to assure the heat radiation efficiency and avoid the moisture problem;
- 6. IR-CUT/AR coated windows;
- 7. Up to 1 hour long time exposure;
- 8. USB3.0 5Gbit/second interface ensuring high speed data transmission;
- 9. Ultra-FineTM color engine with perfect color reproduction capability;
- 10. With advanced video & image processing application ImageView;
- 11. Support both video and trigger modes;
- 12. Providing Windows/Linux/Mac OS multiple platforms SDK;
- 13. Native C/C++, C#/VB.NET, DirectShow, Twain control API.



#### **SPECIFICATION**

Model LC-23

Sensor & Size(mm) 6.0M/ICX694AQG(Color)

1" (12.48x9.99)

Pixel( $\mu$ m) 4.54x4.54

G Sensitivity 1000mv with 1/30s

Dark Signal 8mv with 1/30s

FPS/Resolution 7.5@2748x2200

14@2748x1092

Binning 1x1

Exposure 0.06ms~1h

Other Specification

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 Monochromatic Sensor Capture/Control API Native C/C++, C#/VB.NET, DirectShow, Twain and Labview

Recording System Still Picture and Movie

Cooling System Two-stage TE-cooling System -45 °C below Camera Body

Temperature

**Operating Environment** 

 $\begin{array}{lll} \text{Operating Temperature (in Centidegree)} & -10 \sim 50 \\ \text{Storage Temperature (in Centidegree)} & -20 \sim 60 \\ \text{Operating Humidity} & 30 \sim 80\% \text{RH} \\ \text{Storage Humidity} & 10 \sim 60\% \text{RH} \\ \end{array}$ 

Power Supply DC 5V over PC USB Port

External Power Adapter for Cooling System, DC12V, 3A

Software Environment

Operating System Microsoft® Windows® XP / Vista / 7 / 8 /10 (32 & 64 bit)

OSx(Mac OS X)



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**PC** Requirements

Linux

CPU:

Equal to Intel Core2 2.8GHz or Higher

Memory:

2GB or More

**USB Port:** 

**USB2.0 High-speed Port** 

Display:

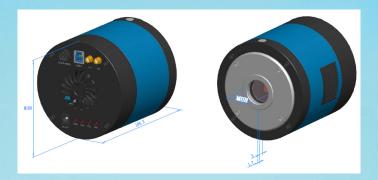
17" or Larger

**CD-ROM** 

### **DIMENSION**

### The LC-23 6.0M/ICX695AQG(C) 1" (12.48x9.99) TE-Cooling C-mount USB3.0 CCD

**Camera** body, made from tough, alloy with CNC technique, ensures a heavy duty, workhorse solution. The camera is designed with a high quality IR-CUT to protect the camera sensor and block the IR light. The fan's vibration is minimized to the low level to eliminate the vibration caused imaging blur. These measures ensure a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.





### **PACKING INFORMATION**



### **Standard Package**

- A Carton L:50cm W:30cm H:30cm (20pcs, 12~17Kg/ carton), not shown in the photo
- B 3-A safety equipment case: L:28cm W:23cm H:15cm (1pcs, 2.8Kg/box); Carton size:L:28.2cm W:25.2cm H:16.7cm
- C LC-22 camera(C-mount)
- D Power adapter: input: AC 100~240V 50Hz/60Hz, out: DC12 V 3A
- E High-Speed USB3.0 A male to B male gold-plated connectors cable /2.0m
- F CD (Driver & utilities software, Ø12cm)