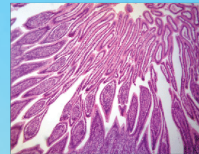
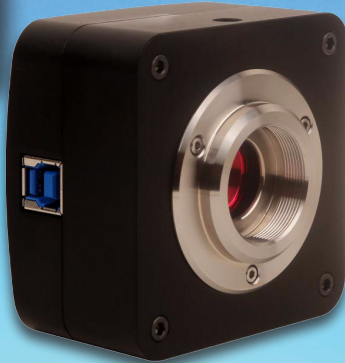




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## **LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)**

**LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** adopt SONY Exmor CMOS sensor as the image-picking device and USB3.0 is used as the transfer interface.

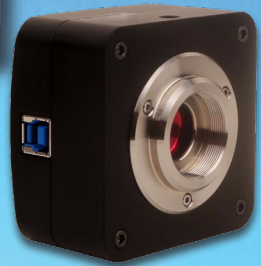
**LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** hardware resolution of 20M and come with the integrated CNC aluminum alloy compact housing.

**LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** integrated with 12 bit Ultra-fine™ Hardware Image Signal Processor Video Pipeline(Ultra-fine™ HISPVP) for Demosaic, Adjustments, Automatic Exposition, Gain Adjustment, One Push White Balance, Chrominance Adjustment, Saturation Adjustment, Gamma Correction, Luminance Adjustment, Contrast Adjustment, Bayer and finally form RAW data for 8/12 bit out. This will move the heavy burden of the processing from the PC to the Ultra-fine™ HISPVP and greatly accelerating the processing speed.



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**LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** with advanced video & image processing application ImageView; Providing Windows/ Linux/ OSX multiple platforms SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API;



## APPLICATION

The **LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** can be widely used in bright field, dark field, fluorescent light environment and normal microscope image capture and analysis with higher frame rate.

## FEATURES

The basic characteristic of **LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** are as follows:

1. SONY Exmor, Exmor R(Back-illuminated), Exmor RS CMOS sensor with USB3.0 interface;
2. Real-time 8/12bit depth switch(depending on sensor);
3. Super high sensitivity of 462mV(IMX183);
4. Ultra low noise and low power dissipation by using column-parallel A/D conversion;
5. With hardware resolution of 20M;
6. Rolling Shutter or Global Shutter;
7. Standard C-Mount camera;
8. CNC aluminum alloy housing;
9. Ultra-fineTM HISPVP and USB3.0 5 Gbps interface ensuring high frame rates(Up to 15 frames for 20M Resolution);



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10. With advanced video & image processing application ImageView;
11. Providing Windows/Linux/Mac OS multiple platforms SDK;
12. Native C/C++, C#/VB.Net, DirectShow, Twain, LabView.

## SPECIFICATION

Model	LC-17
Sensor & Size(mm)	20M/IMX183(Color) 1 "(15.86mm)
Pixel Size( $\mu$ m)	2.4 x2.4
G Sensitivity	462mv with 1/30s
Dark Signal	0.21mv with 1/30s
FPS/Resolution	15@5440x3648 50@2736x1824 60@1824x1216
Binning	1x1 2x2 3x3
Exposure	0.1ms~15s
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-fine <sup>TM</sup> HISPVP /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	Natural
Operating Environment	
Operating Temperature(in Centidegree)	-10~ 50
Storage Temperature(in Centidegree)	-20~ 60
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH



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Power Supply  
Software Environment  
Operating System

DC 5V over PC USB Port

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

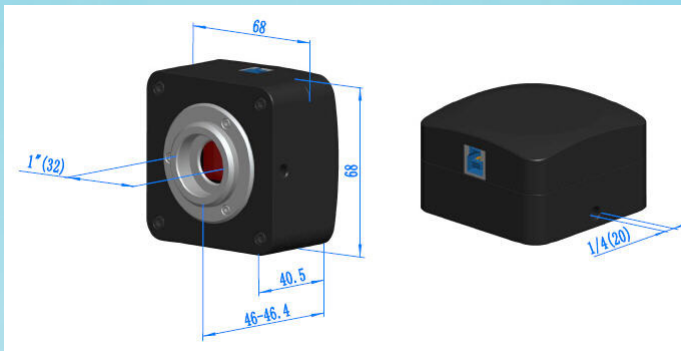
USB Port: USB3.0 High-speed Port

Display: 17" or Larger

CD-ROM

## DIMENSION

The **LC-17 20M/IMX183(C) 1" (15.86mm) USB3.0 CMOS Digital Camera (HISPVP)** body, made from tough, CNC aluminum alloy, ensures a heavy duty, workhouse 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.





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## 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 (0.58~0.6Kg/ box)
- C LC-17 Camera
- D High-speed USB3.0 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)



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- G Fixed lens adapter  
C-mount to Dia.23.2mm eyepiece tube  
(Please choose 1 of them for your microscope)

Note: For F and G 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.

- H (Dia.23.2mm to 30.0mm Ring)/Adaptor rings for 30mm eyepiece tube  
I (Dia.23.2mm to 30.5mm Ring)/ Adaptor rings for 30.5mm eyepiece tube  
J (Dia.23.2mm to 31.75mm Ring)/ Adaptor 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.)**

## SAMPLE IMAGES

