

## MDE4 Series USB3.0 Eyepiece Camera



### Introduction

MDE4 is an economic version with simple and compact structure USB3.0 CMOS eyepiece camera. USB3.0 is used as the data transfer interface.

Microscope eyepiece camera with 23.2 diameter and compact size;

The MDE4 comes with high-speed USB3.0 interface and high frame rate video display keep the screen smooth without interruption; Also the MDE4 comes with advanced video & image processing application ImageView.

The MDE4 can be widely used to transfer the mono or binocular student microscopes to digital microscopes.

With 23.2 to 30mm or 23.2 to 30.75 convert ring, the MDE4 camera can also change the stereo microscope to digital stereo microscope.

### Features

The basic characteristic of MDE4 cameras are as follows:

1. Microscope eyepiece camera with 23.2 diameter and compact size;
2. Easy to extend to C or CS- Mount camera with high quality lens(optional);
3. High-quality camera with Sony CMOS sensor;
4. Auto white balance and auto-exposure; Brightness, contrast, chroma, and saturation can be adjusted;
5. High-speed USB3.0 interface and high frame rate video display keep the screen smooth without interruption;
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

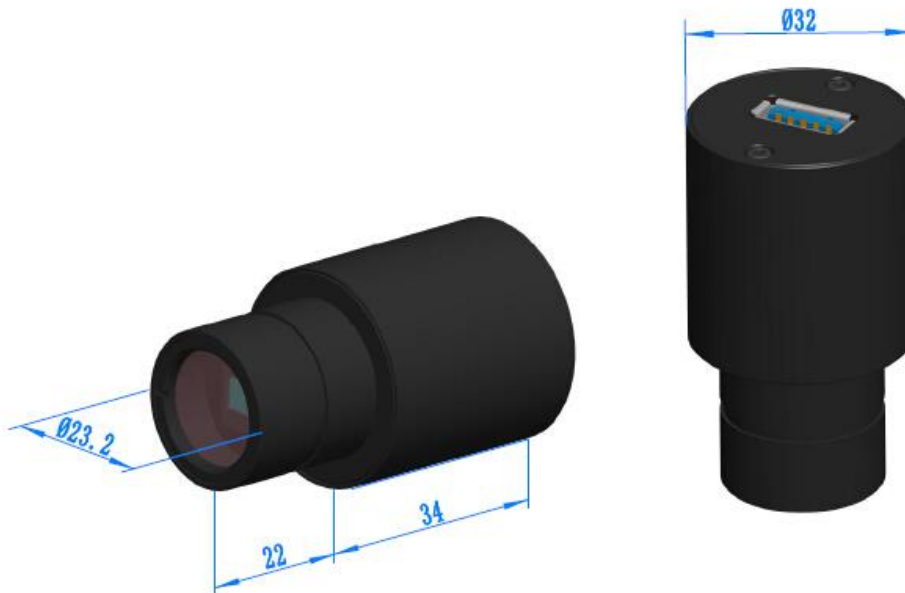
Order Code	Sensor & Size	Pixel( $\mu\text{m}$ )	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure
<b>MDE4-510C</b>	5.1M/IMX335(C) 1/2.8" (5.18x3.89)	2.0x2.0	505mV 70dB 43dB	20@2592x1944 20@1280x960 20@640x480	1x1 1x1 1x1	0.1-2000 ms

C: Color; M: Monochrome;

Other Specification for MDE4 Camera	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	Auto White Balance
Color Technique	N/A
Capture/Control API	Windows/Linux/macOS/Android Multiple Platform SDK (Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
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
Power Supply	DC 5V over PC USB3.0 Port
Software Environment	
Operating System	Microsoft® Windows® XP / Vista / 7 / 8 /10/11 (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 of MDE4

The MDE4 body, made from aluminum alloy blackening, ocular housing: Dia.32 X 56mm ensures a heavy duty, workhorse solution. The camera is designed with a high quality IR-CUT filter to filter the infrared light and protect the camera sensor. No moving parts included. This design ensures a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.



Dimension of MDE4

## Packing Information for MDE4



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### 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 (0.25~0.35Kg/ box)
C	MDE4 series camera
D	High-Speed USB3.0 USB315-ATA   USB 3.0 A Male to A Male Cable,1.5m
E	CD (Driver & utilities software, Ø8cm), We have used USB flash drive to replace CD

### Optional Accessory

F	C-Mount Adapter Housing:108027(HS502)
G	108015(Dia.23.2mm to 30.0mm Ring)/Adapter rings for 30mm eyepiece tube
H	108016(Dia.23.2mm to 30.5mm Ring)/ Adapter rings for 30.5mm eyepiece tube
I	108017(Dia.23.2mm to 31.75mm Ring)/ Adapter rings for 31.75mm eyepiece tube
J	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.)