BUC3D Series C-mount USB3.0 CMOS Camera

Introduction

BUC3D series cameras are ultra-high performance USB3.0 CMOS cameras and they adopt ultra-high performance CMOS sensor as the image-picking device and USB3.0 is used as the data transfer interface.

BUC3D series cameras hardware resolutions range from 5.0M to 10M and come with the CNC aluminum alloy compact housing.

BUC3D series cameras come with advanced video & image processing application ImageView; Providing Windows/Linux/ OSX multiple platforms SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API;

The BUC3D series cameras can be widely used in bright field light environment and microscope image capture and analysis with higher frame rate.

Features

The basic characteristic of the BUC3D cameras are as follows:

1. Standard C-Mount camera with Aptina CMOS sensor;

2. CNC aluminum alloy housing;

3. USB3.0 5 Gbps interface ensuring high frame rate;

4. With advanced video & image processing application ImageView;

5. Providing Windows/Linux/Mac OS multiple platforms SDK;

6. Native C/C++, C#/VB.NET, DirectShow, Twain Control API.

Specification

Order Code	Sensor & Size	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure
BUC3D-500C	5.1M/MT9P006(C) 1/2.5“ (5.70x4.28)	2.2x2.2	1.76v/lux-sec 67.74dB 38.5dB	14.0@2592x1944 29.4@1280x960 103.1@640x480	1x1 2x2 4x4	0.1ms~2000ms
BUC3D-1000C	10M/MT9J003(C) 1/2.3“ (5.98x4.58)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB	7.2@3664x2748 23.8@1832x1374 77.4@912x686	1x1 2x2 4x4	0.1ms~2000ms

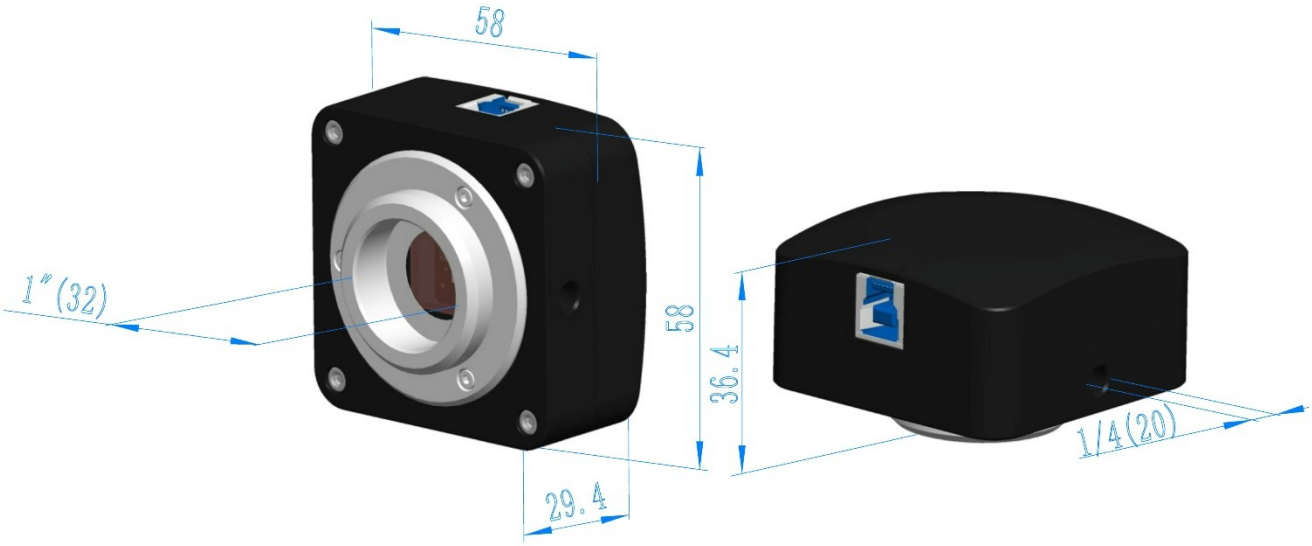
C: Color; M: Monochrome;

Other Specification for BUC3D Camera	
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™ 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*	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
	USB Port: USB3.0 High-speed Port
	Display:17” or Larger
	CD-ROM

Dimension of BUC3D

The BUC3D body, made from tough, aluminum 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. This design ensures a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.



Dimension of BUC3D

Packing Information for BUC3D

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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 (0.67~0.7Kg/ box)	
C	BUC3D series USB3.0 C-mount CMOS 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)
		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), our 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 of BUC3D with Microscope or Telescope Adapter

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)
Telescope Camera	 (31.75mm Adapter)	 (31.75mm Adapter)