

BUC4C Series C-mount USB2.0 CCD Camera



Introduction

BUC4C series CCD cameras are ultra-high performance Super HAD CCD camera. The cameras adopt Sony Super HAD CCD sensor as the image capture device; The Super HAD CCD is a version of Sony's high performance CCD HAD (Hole-Accumulation Diode) sensor with sharply improved sensitivity by the incorporation of a new semiconductor technology developed by Sony Corporation. USB2.0 is used as the data transfer interface.

BUC4C series CCD cameras come 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 BUC4C series CCD cameras can be widely used in bright field, dark field, fluorescent light environment for microscope image capture and analysis.

Features

The BUC4C's basic characteristic is as follows:

1. Standard C-Mount camera with SONY Super HAD CCD 0.8~5.2M sensor;
2. USB2.0 interface ensuring high speed data transmission;
3. Ultra-Fine color engine with perfect color reproduction capability;
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.

BUC4C Datasheet

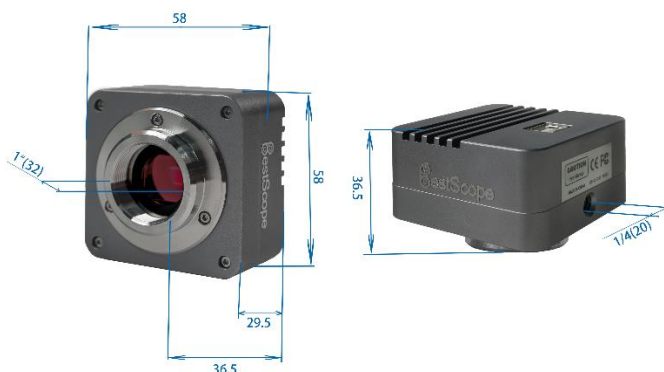
Order Code	Sensor & Size(mm)	Pixel Size(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
BUC4C-520C	5.2M/ICX655AQ(C) 2/3" (8.44x7.07)	3.45x3.45	420mv with 1/30s 4mv with 1/30s	4.3@2448x2050 10.5@960x720	1x1	0.22ms~60s
BUC4C-510C	5.1M/ICX452AQ(C) 1/1.8" (7.19x5.39)	2.775x2.775	260mv with 1/30s 16mv with 1/30s	4@2592x1944 35@560x420	1x1, 2x2	0.212ms~77ms
BUC4C-500C	5.0M/ICX282AQ(C) 2/3" (8.70x6.53)	3.40x3.40	280mv with 1/30s 16mv with 1/30s	4.5@2560x1920 9@1280x960	1x1, 2x2	0.203ms~60s
BUC4C-200C	2.0M/ICX274AQ(C) 1/1.8" (7.04x5.28)	4.40x4.40	420mv with 1/30s 8mv with 1/30s	10@1600x1200	1x1	0.135ms~60s
BUC4C-140BC	1.4M/ICX205AK(C) 1/2" (6.32x4.76)	4.65x4.65	400mv with 1/30s 16mv with 1/30s	15@1360x1024	1x1	0.127ms~60s
BUC4C-140M	1.4M/ICX205AL(M) 1/2" (6.32x4.76)	4.65x4.65	450mv with 1/30s 16mv with 1/30s	15@1360x1024	1x1	0.127ms~60s

C:Color; M:Monochrome;

Other Specification for BUC4C	
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:USB2.0 High-speed Port
	Display:17" or Larger
	CD-ROM

Dimension of BUC4C

The BUC4C 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.



Dimension of BUC4C

Packing Information of BUC4C



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 (0.67~0.8Kg/ box)	
C	BUC4C series 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)
<p>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;</p>		
H	108015(Dia.23.2mm to 30.0mm Ring)/Adaptor rings for 30mm eyepiece tube	
I	108016(Dia.23.2mm to 30.5mm Ring)/ Adaptor rings for 30.5mm eyepiece tube	
J	108017(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.)

Extension of BUC4C with Microscope or Telescope Adapter

Extension	Picture
C-mount Camera	 <p>Machine vision; Medical imaging; Semiconductor equipment; Test instruments; Document scanners; 2D barcode readers; Web camera and security video; Microscope imaging;</p>
Microscope Camera	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>23.2mm Adjustable Adapter</p> </div> <div style="text-align: center;">  <p>23.2mm Fixed Adapter</p> </div> </div>
Telescope Camera	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>31.75mm Adjustable Adapter</p> </div> <div style="text-align: center;">  <p>31.75mm Fixed Adapter</p> </div> </div>