

## BWC Series C-mount WiFi CMOS Camera



### Introduction

BWC series cameras are WiFi cameras and they adopt ultra-high performance CMOS sensor as the image capture device. WiFi is used as the data transfer interface.

When a BWC camera is attached to the eyepiece or trinocular head of a microscope and started, it will generate a WiFi signal for sending high-resolution images from a microscope to WiFi-enabled devices such as smartphones, tablets, and computers with iOS, Android, OS X, Linux and Windows operating systems, streaming images to up to six devices simultaneously.

The camera includes ImageView image software for quantifying, measuring and annotating images and for using with an interactive white board. It also works with the free, downloadable ImageView app for viewing, capturing, and editing images.

### Features

The basic characteristic of BWC cameras are as follows:

1. C-Mount camera has 25.4 mm or 1 inch diameter with 32 threads per inch;
2. Scientific research grade camera with Aptina CMOS sensor;
3. Sends H.264 encodec high-resolution images from a microscope to WiFi-enabled smartphones, computers and tablets with iOS, Android and Windows operating systems;
4. Streams images to several devices simultaneously;
5. Integrated zinc aluminum alloy housing;
6. Ultra-Fine™ color engine with perfect color reproduction capability;
7. With advanced video & image processing application ImageView (only support simple video viewing

capturing for IOS/ android system);

8. Custom programmable with SDK provided(Windows/Linux/OS).

## Specification

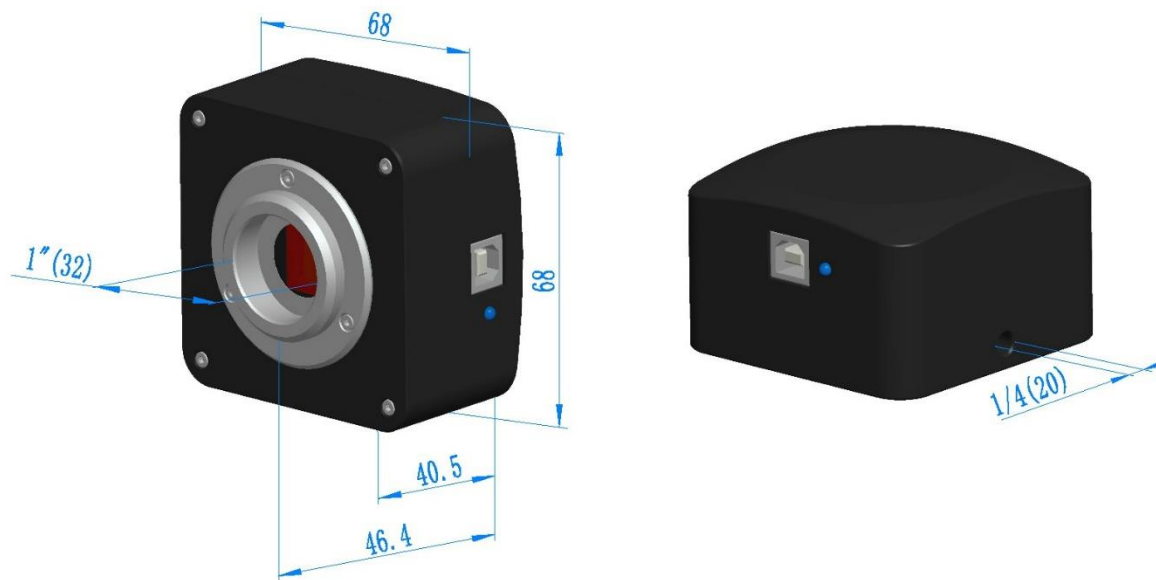
Order Code	Sensor Size(mm)	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure(ms)
<b>BWC-1080</b>	1080P/IMX222 (C) 1/2.8" (5.38x3.02)	2.8x2.8	510mV with 1/30s 0.15mv with 1/30s	25@1920x1080	1x1	0.059ms~1941ms
<b>BWC-720</b>	720P/MT9P001 (C) 1/2.5" (5.63x3.17))	2.2x2.2	1.0 V/lux-sec 61dB 43dB	10@1280x720	2x2	Auto Exposure

C: Color; M: Monochrome;

Other Specification for BWC Camera	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	Whole Area 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
Maximum Connected Devices	<=3
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	USB Charger, Not Recommend PC USB Port
Software Environment	
Operating System	Microsoft® Windows® XP / Vista / 7 / 8 / 10 (32 & 64 bit) <a href="#">IOS IPAD or iPhone, Android PAD and Phone</a>
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory:2GB or More
	<a href="#">WiFi Adapter with DHCP Enabled</a>
	Display:17" or Larger CD-ROM
PAD	<a href="#">IPAD or PAD with Android System</a>
Mobile Phone	<a href="#">iPhone or Smart Phone with Android System</a>

### Dimension

The BWC 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. This design ensures a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.



Dimension of BWC


### Packing Information



Packing Information of BWC

Standard Camera Packing List		
A	Carton L:52cm W:32cm H:33cm (20pcs, 11.4~14Kg/ carton), not shown in the photo	
B	Gift box L:15cm W:15cm H:10cm (0.57~0.58Kg/ box)	
C	BWC series USB2.0 C-mount CMOS camera	
D	High-speed USB2.0 A male to B male gold-plated connectors cable /2.0m(for PC power only) or with USB charger	
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 BWC 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		

Telescope Camera



(23.2mm Adapter)



(23.2mm Adapter)



(31.75mm Adapter)



(31.75mm Adapter)