STALWART

C-mount WiFi CMOS Color Digital Camera
SWC Series

SWC Series

Introduction

SWC 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 SWC camera is attached to the eyepiece or trinocular head of a microscope and started, it will generates 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

- C-Mount camera has 25.4 mm or 1 inch diameter with 32 threads per inch.
- Scientific research grade camera with Aptina CMOS sensor.
- Sends H.264 encodec high-resolution images from a microscope to WiFi-enabled smartphones, computers and tablets with iOS, Android and Windows operating systems;
- Streams images to several devices simultaneously;
- Integrated zinc aluminum alloy housing;
- Ultra-FineTM color engine with perfect color reproduction capability;With advanced video & image processing application ImageView (only support simple video viewing capturing for IOS/ android system);
- Custom programmable with SDK provided(Windows/Linux/OS).

Specification

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

Other Specification for SWC 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-FineTM 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) IOS IPAD or IPhone, Android PAD and Phon
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory:2GB or More
	WiFi Adapter with DHCP Enabled
	Display:17” or Larger
	CD-ROM
PAD	IPAD or PAD with Android System
Mobile Phone	IPhone or Smart Phone with Android System

Dimension

The SWC 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.