

STALWART

C-mount CCD Color Digital Camera STC6A Series



STC6A-Series

Introduction

STC6A series USB3.0 CCD digital camera adopt Sony ExView HAD CCD sensor as the image capture device. Sony ExView HAD CCD is a CCD that drastically improves light efficiency by including near infrared light region as a basic structure of HAD (Hole-Accumulation-Diode) sensor. USB3.0 is used as the data transfer interface. STC6A series cameras" hardware resolutions range from 2.8M to 6M and come with the integrated CNC aluminum alloy compact housing.

STC5IB series 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 STC5IB series cameras can be widely used in low light environment and microscope fluorescence image capture and analysis, as well as the astronomy deep sky applications

Features

- Standard C-Mount camera with SONY ExView HAD CCD II sensors from 2.8M ~ 6M;
- IR-CUT Coated Windows;
- Up to 1000s long time exposure;
- USB3.0 5Gbit/second interface ensuring high speed data transmission;
- Ultra-Fine™ color engine with perfect color reproduction capability;
- With advanced video & image processing application ImageView;
- Providing Windows/Linux/Mac OS multiple platforms SDK;
- Native C/C++, C#/VB.NET, DirectShow, Twain Control API.

Specification

Item	STC6A-1200C	STC6A-1200M	STC6A-900C	STC6A-900M
Sensor & Size(mm)	12M/ICX834AQG© 1" (13.15x8.77)	12M/ICX834ALG (M) 1" (13.15x8.77)	9.0M/ICX814AQG © 1" (12.47x9.98)	9.0M/ICX814ALG (M) 1" (12.47x9.98)
Pixel(μm)	3.1x3.1	3.1x3.1	3.69x3.69	3.69x3.69
G Sensitivity Dark Signal	420mv with 1/30s 15.2mv with 1/30s	420mv with 1/30s 12mv with 1/30s (F8.0)	580mv with 1/30s 12mv with 1/30s	660mv with 1/30s 12mv with 1/30s (F8.0)
FPS/Resolution	3.6@4248x2836 3.6@2124x1418	3.6@4248x2836 3.6@2124x1418	4.4@3388x2712 4.4@1694x1356	4.4@3388x2712 4.4@1694x1356
Binning	1x1, 2x2	1x1, 2x2	1x1, 2x2	1x1, 2x2
Exposure	0.06ms~1000s	0.06ms~1000s	0.06ms~1000s	0.06ms~1000s

Specification

Item	STC6A-600C	STC6A-600M	STC6A-280C	STC6A-280M
Sensor & Size(mm)	6.0M/ICX694AQG© 1" (12.48x9.99)	6.0M/ICX694ALG (M) 1" (12.48x9.99)	2.8M/ICX674AQG © 2/3" (8.81x6.63)	2.8M/ICX674ALG (M) 2/3" (8.81x6.63)
Pixel(μm)	4.54x4.54	4.54x4.54	4.54x4.54	4.54x4.54
G Sensitivity	880mv with 1/30s	1000mv with 1/30s	800mv with 1/30s	950mv with 1/30s
Dark Signal	8mv with 1/30s	8mv with 1/30s	4mv with 1/30s	4mv with 1/30s
FPS/Resolution	7.5@2748x2200 14@2748x1092	7.5@2748x2200 14@2748x1092	15@1938x1460 17@1610x1212 18@1930x1092	15@1938x1460 17@1610x1212 18@1930x1092
Binning	1x1	1x1	1x1	1x1
Exposure	0.06ms~1000s	0.06ms~1000s	0.05ms~1000s	0.05ms~1000s

Specification

Item	STC6A-140C	STC6A-140M
Sensor & Size(mm)	1.4M/ICX825AQA© 2/3" (8.88x6.70)	1.4M/ICX825ALA(M) 2/3" (8.88x6.70)
Pixel(μm)	6.45x6.45	6.45x6.45
G Sensitivity Dark Signal	2000mv with 1/30s 4.8mv with 1/30s	2000mv with 1/30s 4.8mv with 1/30s
FPS/Resolution	25@1376x1040	25@1376x1040
Binning	1x1	1x1
Exposure	0.07ms~1000s	0.07ms~1000s

Other Specification for STC6A 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
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

The STC6A body, made from tough, CNC 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. These measures ensure a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.