

# STALWART

## C-mount CMOS Color Digital Camera STC3D Series



STC3D-Series

## Introduction

STC3D 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. STC3D series cameras hardware resolutions range from 5.0M to 10M and come with the CNC aluminum alloy compact housing.

STC3D series cameras come with advanced video & image processing application ImageView; Providing Windows/Linux/ OS X multiple platforms SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API; The STC3D series cameras can be widely used in bright field light environment and microscope image capture and analysis with higher frame rate

## Features

- Standard C-Mount camera with Aptina CMOS sensor;
- CNC aluminum alloy housing;
- USB3.0 5 Gbps interface ensuring high frame rate;
- 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	STC3D-500C	STC3D-1000C
Sensor & Size(mm)	5.1M/MT9P006© 1/2.5" (5.70x4.28)	10M/MT9J003© 1/2.3" (5.98x4.58)
Pixel size(μm)	2.2x2.2	1.67x1.67
G Responsivity Dynamic range SNRmax	1.76v/lux-sec 67.74dB 38.5dB	0.31v/lux-sec 65.2dB 34dB
FPS/Resolution	14.0@2592x1944 29.4@1280x960 103.1@640x480	7.2@3664x2748 23.8@1832x1374 77.4@912x686
Binning	1x1 2x2 4x4	1x1 2x2 4x4
Exposure	0.1ms~2000ms	0.1ms~2000ms

### Other Specification for STC3D 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

<b>Operating Environment</b>	
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
<b>Software</b>	
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 STC3D 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.