# Software

Catymage from Catalyst Biotech is an advanced yet user-friendly and intuitive software, supplied with CatCam E-Series Cameras. It allows you to control all the functions of the camera along with acquisition, processing, analysis and browsing of the images. A simple user interface makes the installation a simple task and is compatible with all the versions of Windows OS.

### **Hardware Control Module**

**Exposure & Gain** 

Auto / manual exposure; Up to 5 times gain

**White Balance** 

Advanced single-click intelligent white balance setting, temperature and tint can be manually adjusted

**Color Adjustment** 

Hue, saturation, brightness, contrast, gamma initialization adjustment

Frame Rate Control

Adjustment of frame rate available for different computer configurations;

Power Frequency Setting(Anti-filcker)

Natural light/DC, AC 50 HZ, AC60 HZ switch function thoroughly eliminates video flicker;

FIIP

Check the "horizontal" or "vertical" option to eliminate the mirror effect;

Skip and bin sampling

Bin mode can obtain low noise video stream; Skip mode obtains sharper and smoother video stream.

Parameters

Load, save, overwrite, import, export self-defined parameters of camera control panel (including calibration information, exposure and color setting information);

## Image Processing & Analyzing module

### Video functions

Various professional functions: Video broadcast; Time lapse capture; Video record; Video watermark; Video stream grid; Video measurement; Video calibration, Gray calibration; Video EDF; Image stitch; Video scale bar, date and etc.

Image Processing and Enhancement

Control and adjust image by contrast, etc.

#### Measuremer

Easy video or image calibration. Various video and image measurement methods like area, perimeter, angle etc.

Image Stitchin

Image stitching can automatically combine a sequence of relevant images into a perfect larger one

### **EDF**(Extended Depth of Focus)

Aimed at generating a clearer image by combining a sequence of previously captured multi-focus images;

#### Segmentation &Count function

Integrates the advanced 6 image segmentation and particle counting algorithm

# Image Stacking

Image stacking adopts advanced image matching technology

**Color Composite** 

Color composite adds appropriate pseudo color to monochrome fluorescence images.

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer Copyright © CATALYST BIOTECH. PLEASE READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR FOILIBRENT

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# CatCam E-Series

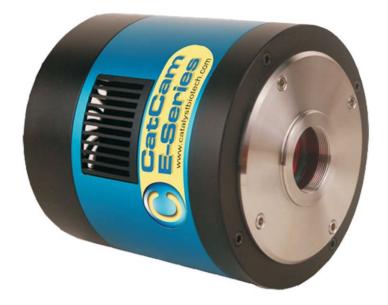


**Upgrade to** 

# **IMAGE ANALYSIS SYSTEM**

without changing

# YOUR EXISTING MICROSCOPE



Keeping up with the legacy of CatCam, the E-Series is a easy-to-use digital scientific camera with a color/monochrome CCD sensor with two-stage peltier, cooling the imaging chip to 50degree below ambient. This will greatly increase the signal to noise ratio and decrease the image noise. Smart structure is designed to assure the heat radiation efficiency and avoid the moisture problem. Electric f an is used to increase the heat radiation speed. It interfaces with a computer via super-speed USB 3.0 and compatible with all the versions of Windows OS. It captures microscope images and displays real-time video on your PC screen. It offers full-screen -size display and the best resolution your computer monitor can provide. CatCam E-Series comes coupled with the multi-functional user-friendly advance software, Catymage, which allows you to preview live images, capture still images and save in various formats, record videos, edit images and also perform micrometry.

## Compatible with any type of microscope

CatCam E-Series works excellent with all kinds of microscope, be it compound upright, inverted or stereo microscope. It optically interfaces with the ocular-tube (by replacing the eye-piece) in case of monocular or binocular microscope and with the C-mount / photo-tube in case of trinocular microscope

# **Easy to Connect - Convenient to use**

CatCam E-Series is a plug-and-play device. It interfaces with the computer via Super speed USB 3.0 port with a single data cable eliminating the need of framegrabbers. This facilitates the user with a choice to connect to either a desktop or a laptop computer.

# **Speed and Resolution**

Each model of CatCam E-Series has an option to select between higher and lower resolution, which helps in providing you with an ideal ratio between speed of data transmission (fps) and the resolution of your specimen's image. The unique sensor architecture is able to provide - frame rates fast enough to capture high speed cell events and lower noise for better signal-to noise measurements at the short exposure times required to achieve high frame rates.

### Camera Control

The camera control has been integrated into the user-friendly intuitive software, Catymage, which controls every operation of the camera and post image acquisition process with just the click of PC mouse/keyboard buttons.







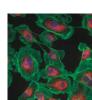












resolutions

similar

Models also available for

Monochrome

CatCam E-Series USB 3.0 CCD Cameras

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recunical specifications	CatCam140DE	Catcam280DE	CatCam280DE CatCam600DE	CatCam900DE CatCam1200DE	CatCam1200DE
Image Sensor (CCD)	2/3" Color	2/3" Color	1" Color	1" Color	1" Color
Scan Mode			Progressive		
Pixel size (active pixel)	6.45µm x 6.45µm	4.54µm x 4.54µm	4.54 µm x 4.54 µm	3.69µm x 3.69µm	3.1µm x 3.1µm
Pixels	1.4MP	2.8MP	6MP	9MP	12MP
Max. Resolution	1360×1024	1940 × 1460	2748 × 2200	3388 × 2712	4248 x 2836
G Sensitivity	2000mv with 1/30s	950mv with 1/30s	1000mv with 1/30s	1000mv with 1/30s	1000mv with 1/30s 1000mv with 1/30s 1000mv with 1/30s
Speed / Frame Rate (frames/sec)	25 @ 1360x1024	15 @ 1940x1460 18 @ 1932x1092	7.5 @ 2748x2200 14 @ 2748x1092	4.4 @ 3388x2712 4.4 @ 1694x1356	3.6 @ 4248x2836 3.6 @ 2124x1418
A/D Converter	12-bit on Board, 8-bit RGB to PC	12-bit on Board, 8-bit RGB to PC	12-bit on Board, 8-bit RGB to PC	12-bit on Board, 8-bit RGB to PC	12-bit on Board, 8-bit RGB to PC
Binning	1x1	1×1	1x1	1x1, 2x2	1x1, 2x2
Spectral Range		380 - (	380 - 650nm (with IR-cut Fiter)	Fiter)	
Optical Interfce		Microscope C-N	Microscope C-Mount / Photo-tube or Ocular-tube	or Ocular-tube	
Size of mounting barrel		23.2mm and	23.2mm and 30mm/30.5mm with adaptor	ith adaptor	
Computer Interface		USB 3.0 hot	USB 3.0 hot plug and thrust via a USB cable	a USB cable	
Exposure	0.07ms~1hr ROI Auto & Manual	0.05ms∼1hr ROI Auto & Manual	0.05ms~1hr 0.06ms~1hr 0.06ms~1hr 0.06ms~1hr 0.06ms~1hr ROI Auto & Manual ROI Auto &	0.06ms~1hr ROI Auto & Manual	0.06ms∼1hr ROI Auto & Manual
White Balance		ROI White Balar	ROI White Balance / Manual Temp Tint Adjustment	Tint Adjustment	
Operating Temperature			-10 ~ 50°C		
Operating Humidity			30 - 80% RH		
Image output			USB 3.0		
Power supply		USB 3.0 & Ext. Powe	USB 3.0 & Ext. Power Adapter for Cooling System, DC12V, 3A	System, DC12V, 3A	
Cooling System		Two-stage TE-cooling	Two-stage TE-cooling System 50°C below ambient Temperature	ambient Temperature	
Accessories included		Two adaptors (c	Two adaptors (dia.30mm, dia.30.5mm, one each)	mm, one each)	