

HIGH PERFORMANCE EMCCD & CCD CAMERAS FOR LIFE SCIENCES



Primary applications
Fixed Cell Imaging
Immunofluorescence
Cell Trafficking
FRET, FRAP, FISH
Near-Infrared DIC
Calcium/Ion Imaging

Rev A1

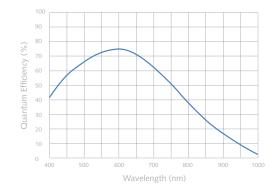




1940 x 1460 imaging array 4.54 x 4.54 µm pixels

The CoolSNAP MYO is a high resolution, high sensitivity camera for moderate to low-light life science applications. This unique cooled CCD provides 4.54µm pixel pitch, 14-bit digitization at 20MHz, enabling high spatial resolution and an optimized frame rate for live cell imaging. Its 2.8 Megapixels and a high Quantum Efficiency enables sensitive imaging with the option for binning for a higher dynamic range as well as increased signal-to-noise performance – all while providing an ideal pixel pitch for microscopy.

Features	Benefits	
1940 x 1460 imaging array 4.54 x 4.54 µm pixels	High spatial resolution for imaging finer details	
High Quantum Efficiency	~75% peak quantum efficiency delivers high sensitivity	
20 MHz read out	High Speed readout to maximize temporal resolution	
USB 2.0 Interface	Easy connectibility and setup	
Binning	Increase frame rate and signal-to-noise performance	
14-bit digitization	Quantify bright and dim signals in the same image	
Thermoelectric cooling	Stabilized cooling produces a low dark current for long exposures	
Fan Disable Option	Disable the fan for vibration-sensitive applications	
C-mount	Easily attaches to microscopes, standard lenses, or optical equipment	
Acquisition software	Captures, analyzes, and saves high-resolution images	
PVCam® Driver	Support in a wide range of third party software packages Supported in Windows 7 64-bit/32-bit	



	1940 x 1460	970 x 730	646 x 486
1 x 1	6.3	11.8	16.8

딛	1 x 1	6.3	11.8	16.8
	2 x 2	11.6	20.8	28.4
	3 x 3	16.2	27.8	36.5
	4 x 4	20.1	33.2	42.6

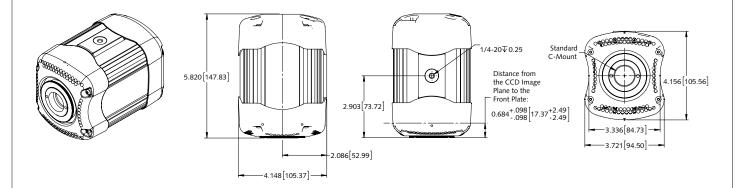
Region

(Frames per second)

Note: Frame rates are measured at 20 MHz with 0-millisecond exposure times.

	Specifications
CCD Sensor	Sony® ICX-674 Interline CCD
CCD Format	1940x1460 imaging array 4.54x4.54 µm pixels 8.8 x 6.6 mm imaging area (11mm diagonal, 2/3″ format)
Linear Full-Well	12,000e-
Read Noise	5.5e- @ 20MHz 4.5e- @ 10MHz 3.5e- @ 1.25MHz
Nonlinearity	<1%
Digitization	20MHz, 10MHz, 1.25MHz
Cooling	0°C
Dark Current	0.005 e-/pixel/second @ 0°C
Operating Environment	0 to 30°C ambient, 0-80% relative humidity non-condensing
Triggering	Trigger First Mode Strobe Mode Bulb Mode
Power Requirements	5V DC, 4A Maximum

Note: Specifications are typical and subject to change.



CoolSNAP is a trademark of Photometrics. Photometrics and PVCam are registered trademarks of Photometrics. Other brand and product names are the trademarks or registered trademarks of their respective owners and manufacturers.

USA 520.889.9933 **Asia Pacific** +65.6841.2094 France +33.1.60.86.03.65 **Germany** +49.89.660.779.3 Japan +81.3.5639.2731 **UK** +44.1628.890858

