

XC-1M

Xcitex High-Speed Camera



Lens sold separately

Features at a Glance

- 1240 x 1080 pixel resolution (native)
- Up to 150 fps @ full resolution
- Up to 500 fps @ reduced resolution
- CMOS image sensor
- Enhanced Near Infrared (NIR) Response
- Dynamic range up to 120 db
- Global shutter
- Monochrome
- Compact size: 60 x 60 x 45 mm

For More Information

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Technical Support:
www.xcitex.com/html/support-services.php

Literature:
www.xcitex.com/html/literature.php

The ideal 30-500 fps camera for motion capture in the life sciences, robotics and industrial automation industries

The XC-1M camera has been designed to give users the flexibility to create a recording environment which meets their particular application needs. Users can choose frame rates beginning at 30 fps up to a maximum of 500 fps with multiple resolution choices up to 1240 x 1080.

Using CMOS image sensor technology, the XC-1M camera delivers the perfect balance of light sensitivity, high recording speed, fast shuttering, and high resolution. Excellent image quality is achieved with a state-of-the-art 1.3 megapixel resolution sensor based on 8 μ m square pixels and 60% quantum efficiency. The extended spectral range makes the XC-1M camera ideal for biology and life science applications.

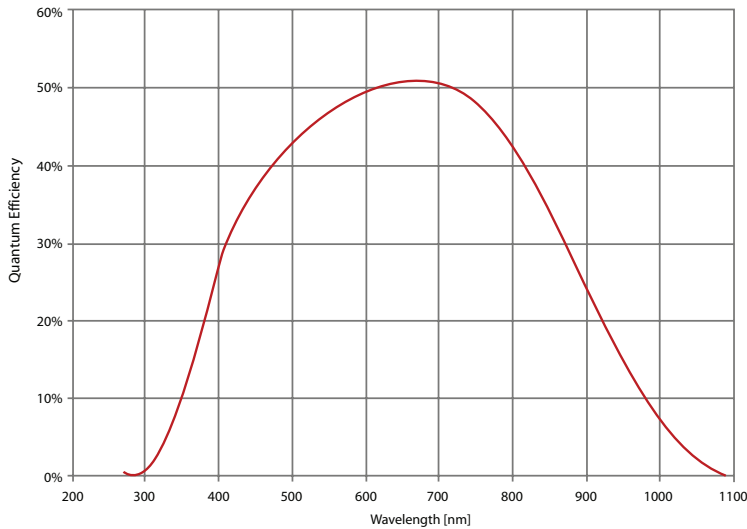
Along with outstanding image quality, the XC-1M offers remarkably good Near Infrared (NIR) responsivity, a dynamic range up to 120 db, and global shutter technology to capture crisp images without blur or distortion. In addition, each individual pixel has a very high saturation capacity, resulting in an excellent signal/noise ratio for extremely sharp, high-contrast images. The compact size of the camera makes it easy to install on walls, tripods, production lines, or into tight spaces.

Frame Rate	Resolution	Format
30 frames/sec	1240 x 1080	HD 1080 (V)
	1240 x 900	DTV 4:3
	1240 x 720	Widescreen 16:9
	1150 x 960	--
	1050 x 1000	Square
60 frames/sec	1240 x 1080	HD 1080 (V)
	1240 x 900	DTV 4:3
	1150 x 960	--
	1050 x 1000	Square
100 frames/sec	1240 x 1080	HD 1080 (V)
	1240 x 900	DTV 4:3
	1150 x 960	--
	1050 x 1000	Square
150 frames/sec	1240 x 1080	HD 1080 (V)
	1150 x 1080	--
	1050 x 960	Square
	960 x 1080	--
200 frames/sec	1240 x 900	DTV 4:3
	1150 x 960	--
	1050 x 960	--
	960 x 960	Square
300 frames/sec	1340 x 600	--
	1150 x 640	Widescreen 16:9
	1050 x 700	--
	960 x 770	--
400 frames/sec	1050 x 520	--
	960 x 570	--
	860 x 630	DTV 4:3
	760 x 710	--
500 frames/sec	1050 x 410	--
	960 x 450	--
	860 x 500	Widescreen 16:9
	760 x 560	DTV 4:3



Spectral response of XC-1M CMOS image sensor

Quantum Efficiency vs. Wavelength



Camera Dimensions

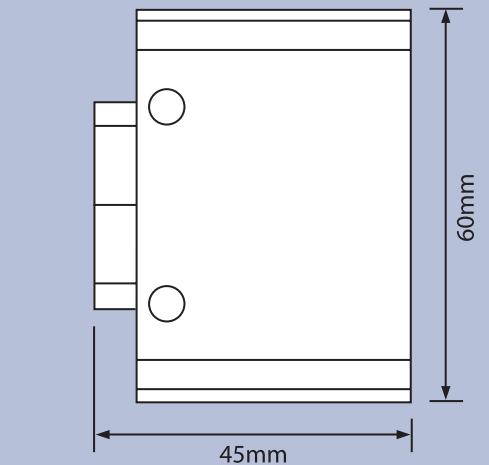
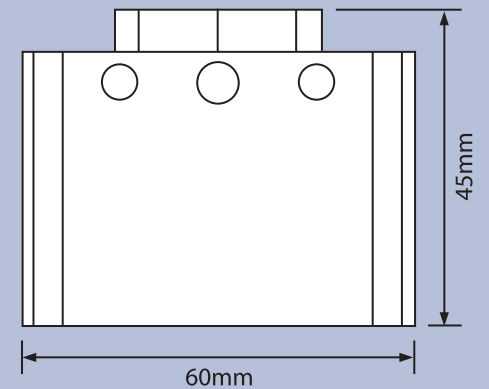
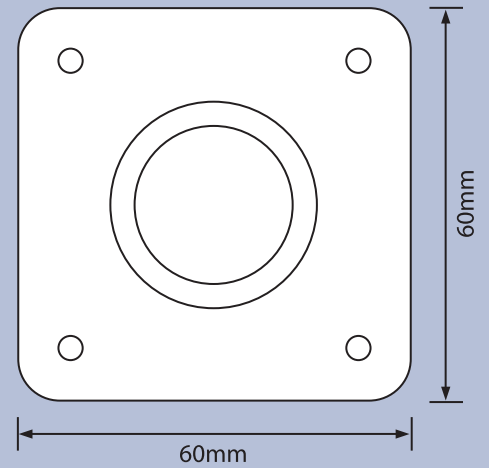


Image Sensor

Technology	CMOS active pixel (APS)
Resolution (total)	1248 x 1082 pixels (maximum)
Pixel size	8 μm x 8 μm
Active Optical area	9.98 mm x 8.64 mm (maximum)
Spectral range	350 to 1000 nm (at 10% of peak responsivity)
Shutter mode	Global shutter

Camera

Grayscale resolution	8 bit
Fixed pattern noise (FPN)	< DN @ 8 bit / correction ON
Operating temperature	0°C to +50°C
Power	+12 V DC ($\pm 10\%$)
Power consumption	< 5.2 W
Dynamic Range	120 db
Conformity	CE / RoHS / WEEE
Optical format	1" c-mount, 2/3" c-mount (5% vignet @ full resolution)
Lens Mount	C-mount, adjustable backfocus
Accessories included	Power supply and 7-meter cable

Dimensions

Dimensions	60 x 60 x 45 mm (w/o lens)
Weight	265 g / 9.5 oz.



FROM MOTION TO DATA TO KNOWLEDGE

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