

RETIGA E9 CMOS CAMERA

KEY FEATURES

- Long exposure CMOS, capable of exposures up to an hour
- Ultra-low dark current due to advanced thermal control
- High-resolution 9 MP sensor
- Small 3.76 μm pixels
- 25 fps imaging speed
- Extended Dynamic Range to capture intense signals
- >90% quantum efficiency

TYPICAL APPLICATIONS

- Live cell imaging
- Gel documentation
- Spatial biology
- Luminescence
- Multispectral imaging
- Micro-plate readers
- Fluorescence microscopy

RELIABILITY

- Three-year warranty
- Extended warranty available

Low Noise and High Pixel Count CMOS Camera for Integration

The Retiga E series of CMOS cameras bring long exposure imaging into the CMOS era, featuring major breakthroughs in thermal noise control that allows for exposures of over an hour. Additionally, Retiga E CMOS cameras have high pixel count sensors capable of high-speed imaging, and are optimized for seamless OEM integration.

The Retiga E9 is capable of long exposure or high speed imaging, features a rolling shutter, and is designed for seamless OEM integration. With industry-leading chamber sealing technology and an Extended Dynamic Range (EDR) mode, the Retiga E9 camera offers simplicity, power, and ease of use.

Onboard triggering, Windows/Linux support, and our dedicated OEM team make integrating and customizing the Retiga E9 a painless process.



RETIGA E9 SPECIFICATIONS

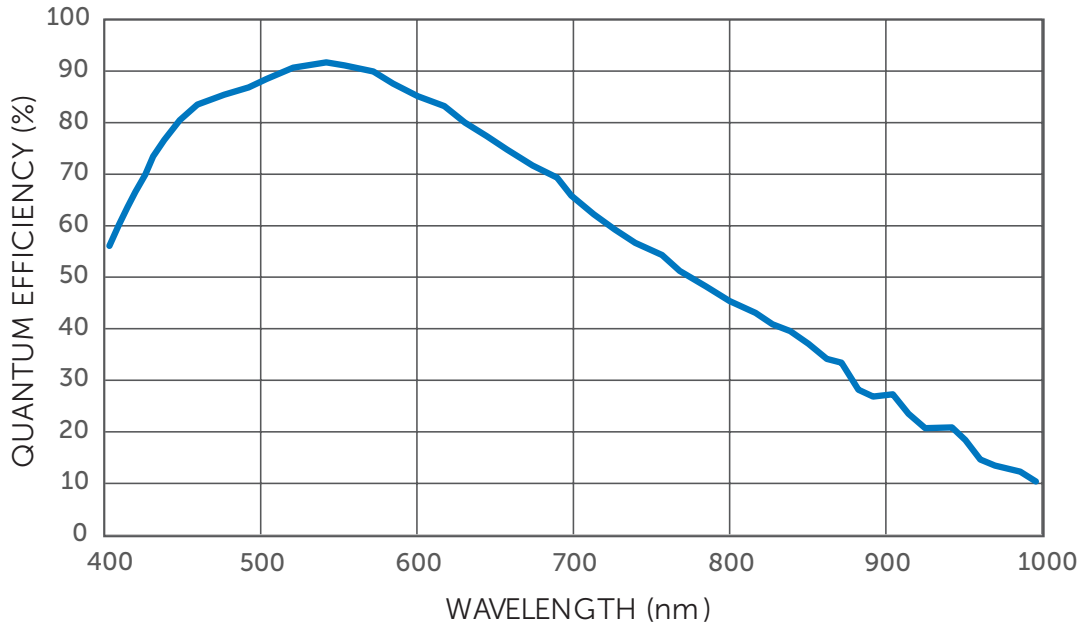
SPECIFICATIONS	Camera Performance
Sensor	Sony IMX533 CMOS sensor
Active Array Size	3001 x 3001 (9 Megapixel)
Pixel Area	3.76 μm x 3.76 μm (14.1 μm^2)
Sensor Area	11.3 mm x 11.3 mm (16 mm diagonal)
Peak QE%	> 90% at 550 nm
Readout Modes	Rolling shutter
Digital Binning	2 x 2 through 16 x 16 binning
Linearity	> 99%
Cooling Options	Air cooled (-25 °C @ 30 °C ambient, 0.001 e ⁻ /pixel/second dark current)
Digital Interfaces	USB 10 Gbps (3.2 Gen 2)
Lens Interfaces	C-mount
Mounting Points	4 x 1/4"-20 UNC
Camera Weight	0.8 kg, 1.76 lbs

CAMERA MODES

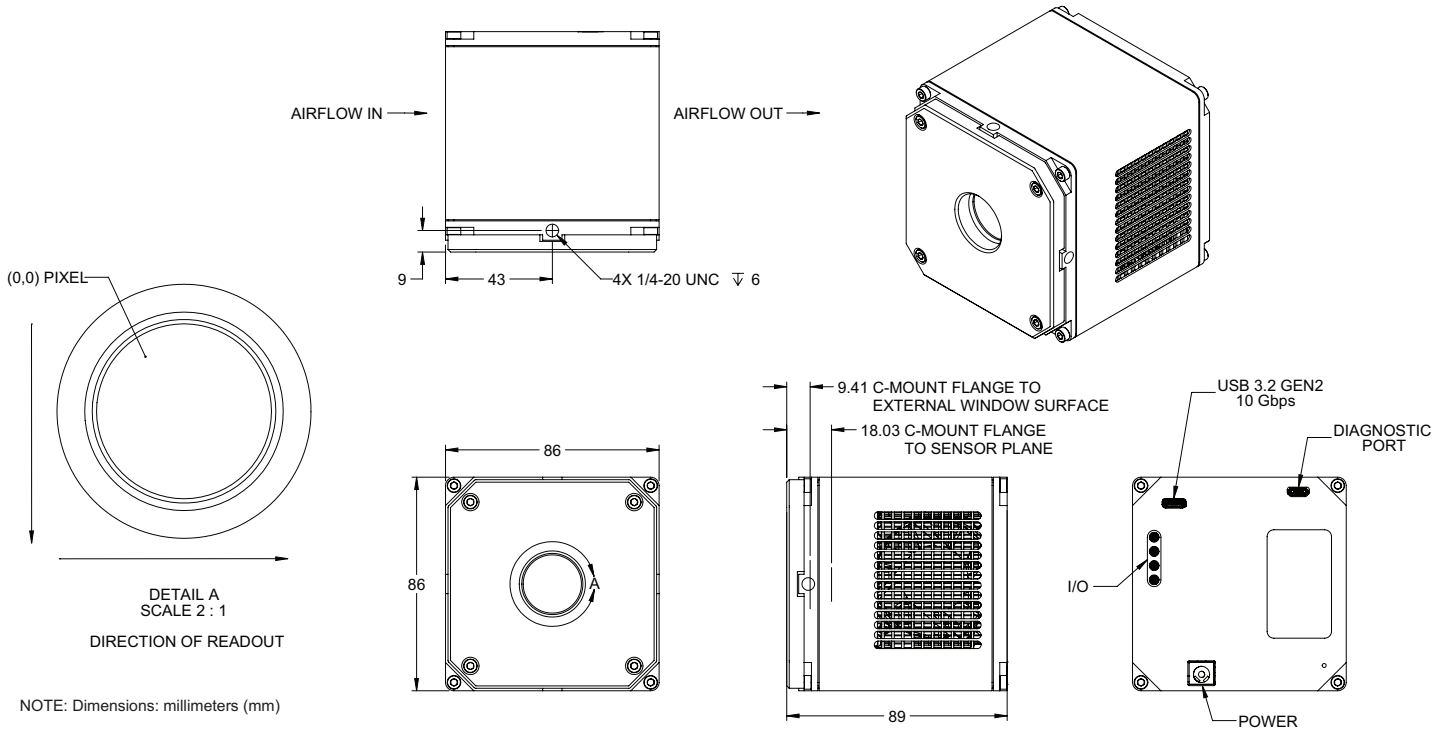
SPECIFICATIONS	Speed	Extended Dynamic Range (EDR)
Bit Depth	16-bit	16-bit
Frame Rate (Full Frame)	25 fps	12 fps*
Read Noise	1.3 e ⁻	1.3 e ⁻
Cooling	-25 °C	-25 °C
Line Time	12.2 $\mu\text{sec}/\text{line}$	12.2 $\mu\text{sec}/\text{line}$
Maximum exposure time	60 minutes	120 minutes*
Dark Current	<0.001 e ⁻ /p/sec	<0.001 e ⁻ /p/sec
Full Well Capacity	23000 e ⁻	23000 e ⁻
Gain	0.75 e ⁻ /gray	0.75 e ⁻ /gray

*EDR combines two exposures of equal time, but different gain modes. Setting the exposure to 60 minutes will take 120 minutes of acquisition

RETIGA E9 QE CURVE



RETIGA E9 DIMENSIONAL OUTLINES (UNIT: MM)



RETIGA E9 ACCESSORIES

ACCESSORIES (INCLUDED)		
USB 10 Gbps interface card	Power supply (12V/10A DC)	PVCAM installation USB
USB A-C data cable, 0.9 m	PVCAM drivers/software	
USB C-C3M data cable	Quick installation guide	
Mini-BNC trigger cable	Performance and gain test data	



FOR MORE INFORMATION REACH OUT ONLINE:

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