

MOMENT CMOS CAMERA

KEY FEATURES

- Ultra-compact form factor
- Single USB data and power
- 50 fps imaging speed
- High resolution 7 MP sensor
- Small 4.5 μm pixels
- True global shutter
- Simple integration

TYPICAL APPLICATIONS

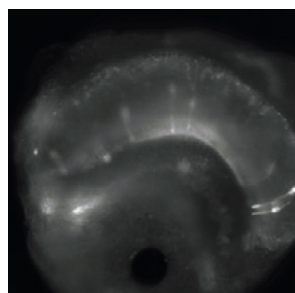
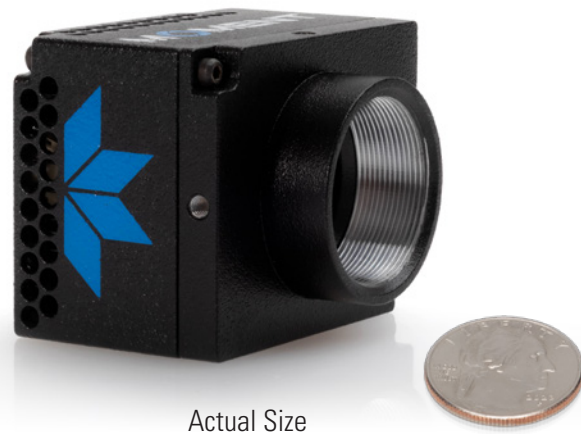
- Live cell imaging
- Spatial biology
- Calcium imaging
- Micro-plate readers
- Fluorescence microscopy

RELIABILITY

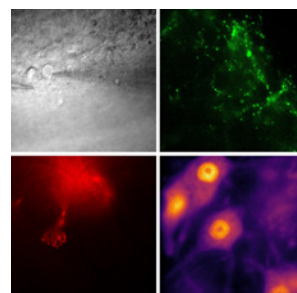
- Three-year warranty
- Extended warranty available

Ultra-Compact CMOS Cameras for Science

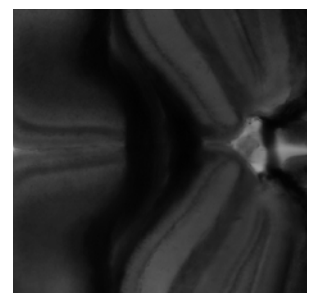
Capture the Moment with this ultra-compact, 7-megapixel CMOS camera. This camera uses a true global shutter, freezing moving objects in time. With both data and power over a single USB 10 Gbps (3.2 Gen 2) cable, the Moment is optimized for easy integration, and capturing a 17.5 mm sensor diagonal at 50 frames per second, the Moment shows you exactly what's happening.



NIR/VIS Brain Imaging
Prof. Marc Spehr



Live Cell Imaging
Dr. Christian Simon



Electrophysiology
Prof. Naoki Yamawaki

MOMENT SPECIFICATIONS

SPECIFICATIONS	Camera Performance
Sensor	Sony IMX420 CMOS sensor
Active Array Size	3200 x 2200 (7.1 Megapixel)
Pixel Area	4.5 x 4.5 μm (20.25 μm^2)
Sensor Area	14.4 mm x 10 mm (17.6 mm diagonal)
Peak QE%	> 73%
Readout Modes	Global shutter
Digital Binning	2 x 1 charge domain (on chip) binning up to 4 x 4 digital binning
Linearity	> 99%
Cooling Options	Uncooled
Digital Interfaces	USB 10 Gbps (3.2 Gen 2)
Lens Interfaces	C-mount
Mounting Points	M3 x 0.5 mounting point per side
Camera Weight	0.096 kg, 0.21 lbs

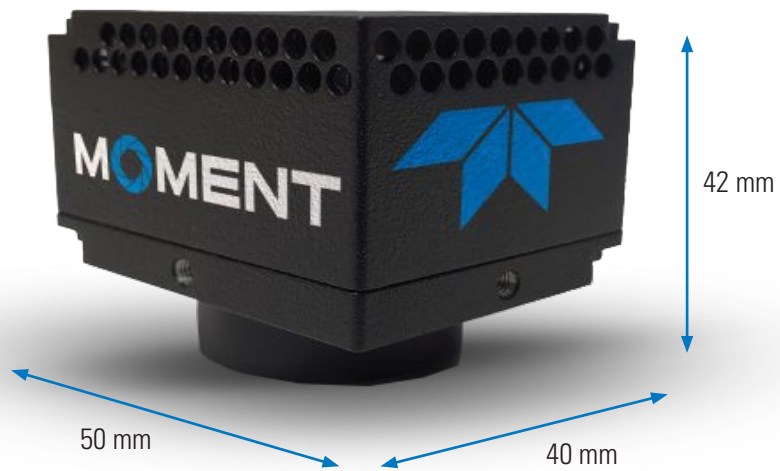
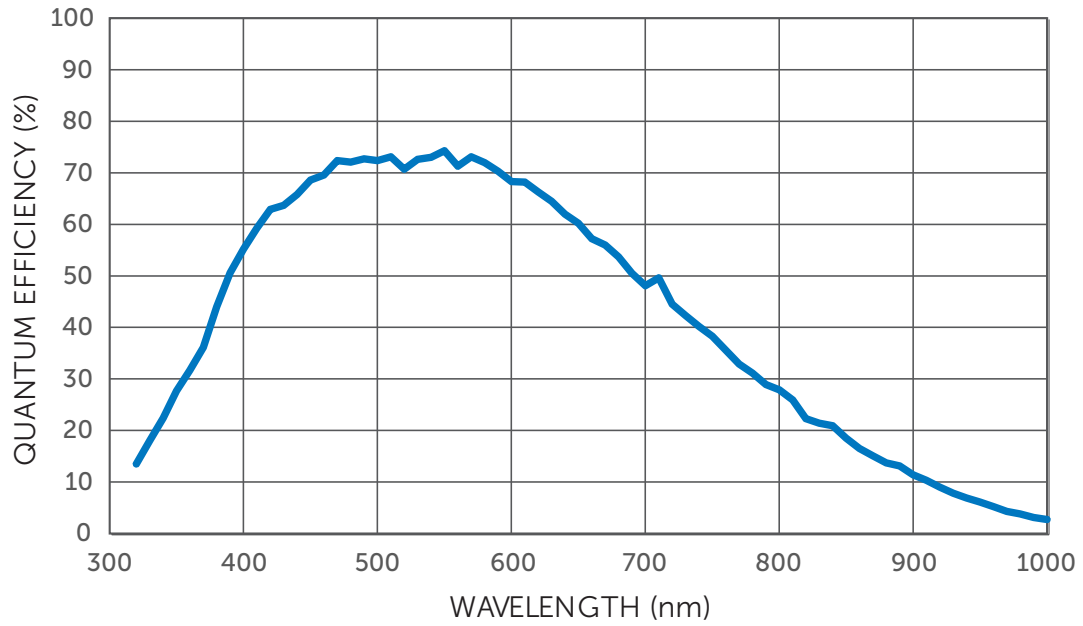
CAMERA MODES

SPECIFICATIONS	Standard
Bit Depth	12-bit
Frame Rate (Full Frame)	51 fps
Read Noise	2.1 e^-
Cooling (Air)	-25 $^{\circ}\text{C}$
Line Time	8.62 $\mu\text{sec}/\text{line}$
Dark Current (Air)	2.0 $e^-/\text{p}/\text{sec}$
Full Well Capacity	8200 e^-

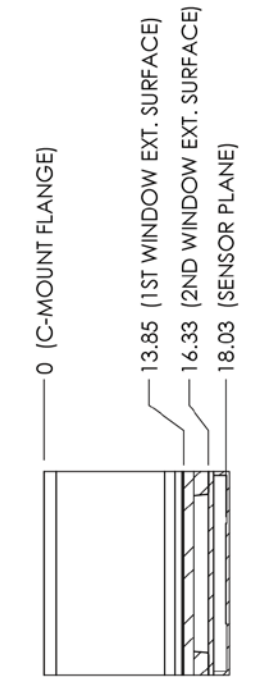
MOMENT SPEED TABLE

FRAME RATES (HZ)	
ARRAY SIZE	SPEED
3200 x 2200	51
3200 x 1100	100
3200 x 550	193
3200 x 275	353
3200 x 8	2071

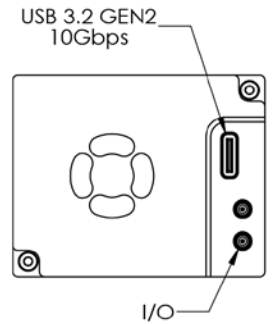
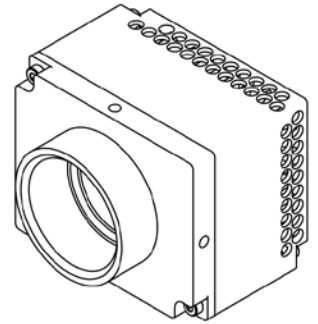
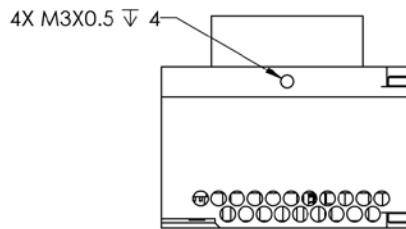
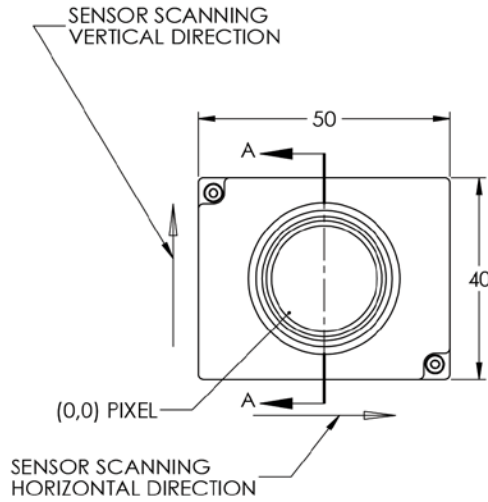
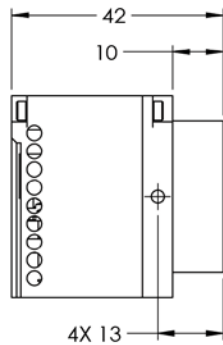
MOMENT QE CURVE



MOMENT DIMENSIONAL OUTLINES (UNIT: MM)



SECTION A-A (CROPPED)
SCALE 2 : 1



MOMENT ACCESSORIES

ACCESSORIES (INCLUDED)

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



FOR MORE INFORMATION REACH OUT ONLINE:

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