

# MicroLine CCD Camera

## ML4240

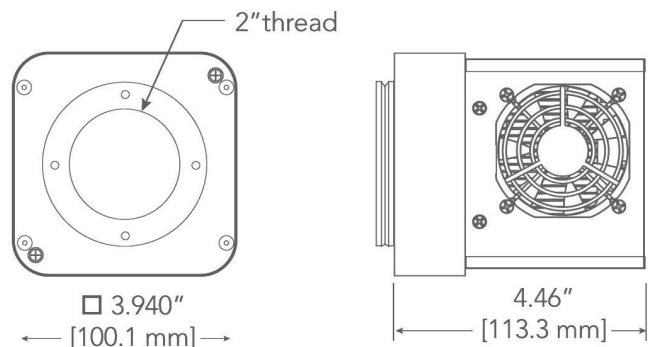
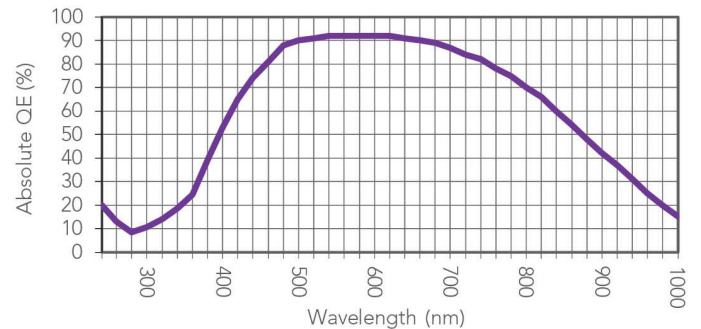
The MicroLine ML4240 offers an outstanding combination of high quantum efficiency, large dynamic range, deep full well capacity, excellent cooling, and large imaging area, all in a compact form factor.

### Technical Data

<b>Sensor Type</b>	Back Illuminated CCD
<b>Sensor</b>	e2v CCD42-40-1-368 (Midband)
<b>Active Pixels</b>	2048 x 2048
<b>Pixel Size (microns)</b>	13.5 x 13.5 $\mu\text{m}$
<b>Imaging Area (Diagonal)</b>	27.6 X 27.6 mm (39 mm)
<b>Full Well Capacity</b>	100000 electrons
<b>(e-) Typical_Readout Noise</b>	9 e- at 500 kHz; 14 e- at 2 MHz
<b>Typical Gain</b>	1.4 e-/counte-/ADU
<b>Dynamic Range</b>	80.6 dB
<b>Anti-Blooming</b>	None
<b>Cooling Method</b>	Air (Optional liquid)
<b>Max. Cooling (Air)</b>	55°C below ambient
<b>Temperature Stability</b>	0.1°C
<b>Dark Current (typical)</b>	0.2 eps at -30C
<b>Interface</b>	USB 2.0
<b>Digitization Clock</b>	500 kHz and 2MHz
<b>Data Bit Depth</b>	16 bit
<b>Non-Linearity</b>	<1%
<b>Channels</b>	1 (optional 2)
<b>Shutter</b>	45 mm
<b>Lens Mount</b>	Optional Nikon or Canon
<b>Subarray Readout</b>	Standard
<b>External Trigger In/Out</b>	Standard
<b>SDK / Software</b>	USB2 / FLIGrab
<b>Weight</b>	2.8 lbs (1.2 kg)
<b>Environment</b>	-30°C to 45°C   10% - 90% Relative Humidity
<b>Power</b>	12V (100-240V AC to 12V DC power supply included). With TEC off: <1A. TEC at 100%: 4.4A. Shutter open: 4A pulse for 100msec. Shutter held open, add 0.22A.



### Absolute Quantum Efficiency



See [www.flicamera.com](http://www.flicamera.com) for alternate configurations



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