

# MicroLine CCD Camera

## ML4240 AM (aka ML2)

This version of the ML4240 uses a back-illuminated sensor on deep depletion silicon with an enhanced multilayer coating, giving high quantum efficiency across the visible and into the near infrared. Deep depletion silicon has substantially higher dark current than standard silicon.

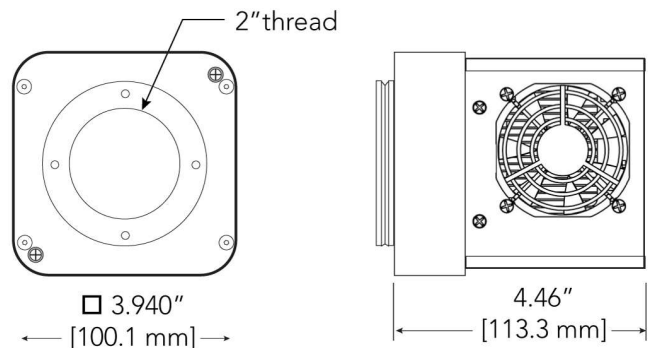
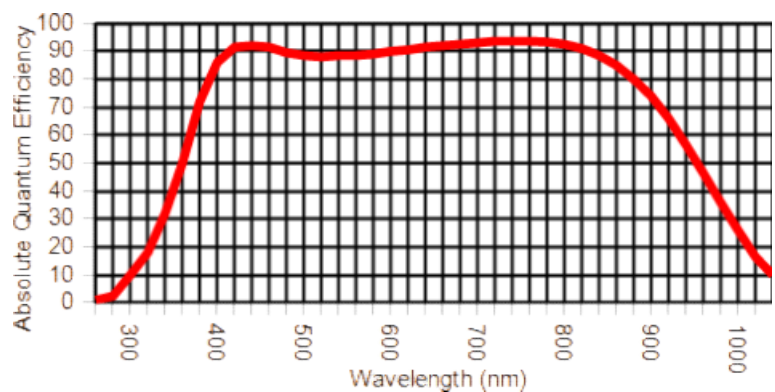
### Technical Data

<b>Sensor Type</b>	Back Illum. Deep Depletion (NIMO) CCD
<b>Sensor</b>	e2v CCD42-40-1-S04 (AM2 coating)
<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 (39.1 mm)
<b>Full Well Capacity (e-)</b>	100000 electrons
<b>Typical_Readout Noise</b>	13 e- at 500 kHz; 16 e- at 2 MHz
<b>Dynamic Range</b>	77.4 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>	15 eps at -40C
<b>Interface</b>	USB 2.0
<b>Digitization Clock</b>	500 kHz and 2MHz (up to 2 channels)
<b>Data Bit Depth</b>	16 bit
<b>Non-Linearity</b>	<1%
<b>Channels</b>	1
<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



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