FINGER LAKES INSTRUMENTATION

MICROLINE CCD CAMERA

ML4240 UV.

DATASHEET flicamera.com/models/ml4240-uv

PRODUCT PAGE

MADE IN USA

This version of the ML4240 uses a back-illuminated sensor on deep depletion silicon with an enhanced coating giving high quantum efficiency in the ultraviolet. Deep depletion silicon has substantially higher dark current than standard silicon.



KEY SPECIFICATIONS

SENSOR	SIZE (MM)	RESOLUTION	PIXEL SIZE
e2v CCD42-40-1-075	27.6 X 27.6 mm (39.1 mm)	2048 x 2048	13.5 x 13.5 µm

FULL WELL	READ NOISE	DARK CURRENT	PEAK Q.E.
100000 electrons	10.5 e- at 500 kHz; 14 e- at 2 MHz	65 eps at -30C	73%

TECHNICAL DATA

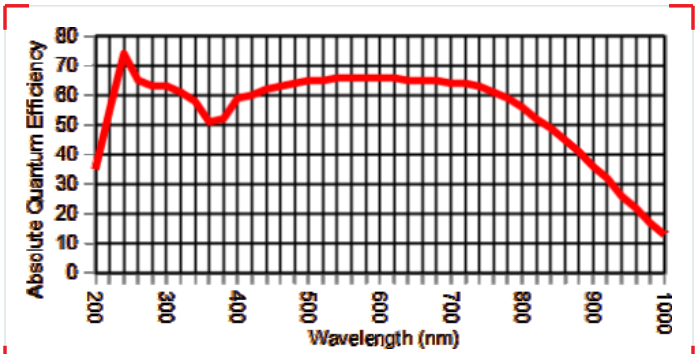
Sensor Type	Back Illum. Deep Depletion (NIMO) CCD	**Sensor**	e2v CCD42-40-1-075
Active Pixels	2048 x 2048	**Pixel Size (microns)**	13.5 x 13.5 µm
Imaging Area (Diagonal)	27.6 X 27.6 mm (39.1 mm)	**Full Well Capacity (e-)**	100000 electrons
Typical Readout Noise	10.5 e- at 500 kHz; 14 e- at 2 MHz	**Dynamic Range**	79.3 dB
Anti-Blooming	None	**Cooling Method**	Air (Optional liquid)
Max. Cooling (Air)	55°C below ambient	**Temperature Stability**	0.1°C
Dark Current (typical)	65 eps at -30C	**Interface**	USB 2.0
Digitization Clock	500 kHz and 2MHz	**Data Bit Depth**	16 bit
Non-Linearity	<1%	**Channels**	1

Shutter	45 mm
Lens Mount	Optional Nikon or Canon
External Trigger In/Out	Standard
Weight	2.8 lbs (1.2 kg)
Peak QE	73%

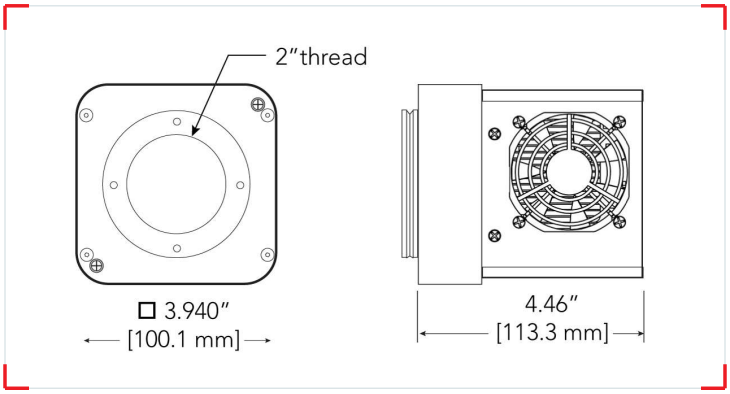
Default BFD	Short
Subarray Readout	Standard
SDK / Software	USB2 / FLIGrab
Environment	-30°C to 45°C | 10% - 90% Relative Humidity

TECHNICAL FIGURES

Absolute quantum efficiency



Mechanical outline



NOTES AND OPERATING CONDITIONS

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.

Default BFD: optical back focal distance of the default configuration, measured from the flat part of the front flange (not including the dovetail) to the sensor. It varies with the flange chosen.

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Request a quote for ML4240 UV

REQUEST A QUOTE

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MECHANICAL DRAWING

DEFAULT CONFIGURATION (Other Flanges Available)

