FINGER LAKES INSTRUMENTATION

MICROLINE CCD CAMERA

ML4240 FI.

DATASHEET flicamera.com/models/ml4240-fi

PRODUCT PAGE

MADE IN USA

The larger pixels of the front-illuminated CCD in the ML4240 FI provide deep dynamic range and gather more light for improved signal-to-noise.



KEY SPECIFICATIONS

SENSOR	SIZE (MM)	RESOLUTION	PIXEL SIZE
e2v CCD42-40-1-383	27.6 X 27.6 mm (39.1 mm)	2048 x 2048	13.5 x 13.5 µm

FULL WELL	READ NOISE	DARK CURRENT	BIT DEPTH
100000 electrons	11 e- @ 700 kHz; 17 e- @ 2 MHz	0.25 eps at -30C	16 bit

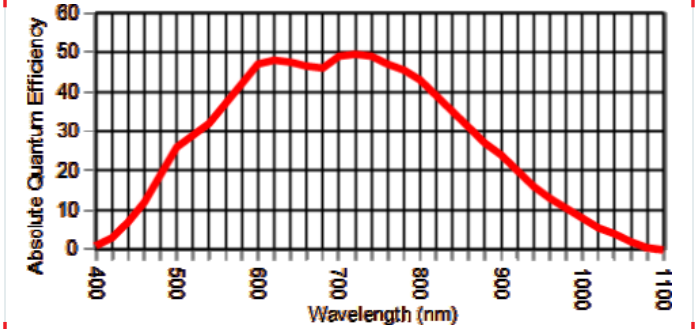
TECHNICAL DATA

Sensor Type	Front-illuminated CCD	**Sensor**	e2v CCD42-40-1-383
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	11 e- @ 700 kHz; 17 e- @ 2 MHz	**Dynamic Range**	78.9 dB
Anti-Blooming	NA	**Cooling Method**	Air (Optional liquid)
Max. Cooling (Air)	58°C below ambient	**Temperature Stability**	0.1°C
Dark Current (typical)	0.25 eps at -30C	**Interface**	USB 2.0
Digitization Clock	700 kHz and 2 MHz	**Data Bit Depth**	16 bit
Non-Linearity	<1%	**Channels**	1
Shutter	45 mm	**Lens Mount**	Optional Nikon or Canon

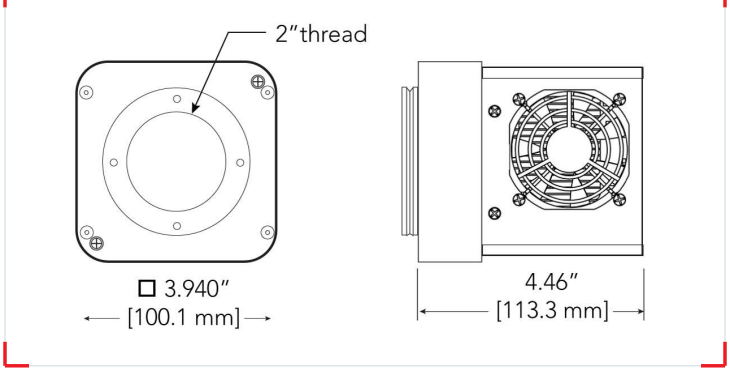
Subarray Readout	Standard	**External Trigger In/Out**	Standard
SDK / Software	USB2 / FLIGrab	**Weight**	2.8 lbs (1.2 kg)
Environment	-30°C to 45°C | 10% - 90% Relative Humidity		

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.

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