FINGER LAKES INSTRUMENTATION

MADE IN USA

MICROLINE CCD CAMERA

ML4710 AM (aka ML2).

DATASHEET flicamera.com/models/ml4710-am

PRODUCT PAGE

This version of the ML4710 uses a back-illuminated CCD 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.



KEY SPECIFICATIONS

SENSOR	SIZE (MM)	RESOLUTION	PIXEL SIZE
e2v CCD47-10-1-197 (ML2, NIMO)	13.3 X 13.3 mm (18.8 mm)	1024 x 1024	13 x 13 µm

FULL WELL	READ NOISE	DARK CURRENT	BIT DEPTH
100000 electrons	11 e- RMS @ 700 kHz; 17e- at 2 MHz	23 eps at -35C	16 bit

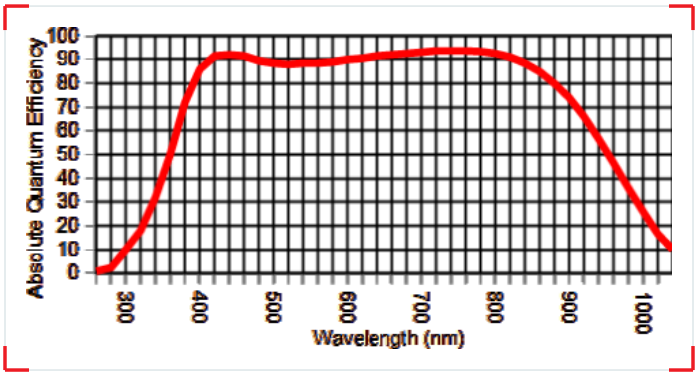
TECHNICAL DATA

Sensor Type	Back Illuminated Deep Depletion CCD	**Sensor**	e2v CCD47-10-1-197 (ML2, NIMO)
Active Pixels	1024 x 1024	**Pixel Size (microns)**	13 x 13 µm
Imaging Area (Diagonal)	13.3 X 13.3 mm (18.8 mm)	**Full Well Capacity (e-)**	100000 electrons
Typical Readout Noise	11 e- RMS @ 700 kHz; 17e- at 2 MHz	**Dynamic Range**	78.9 dB
Anti-Blooming	None	**Cooling Method**	Air (Optional liquid)
Max. Cooling (Air)	65°C below ambient	**Temperature Stability**	0.1°C
Dark Current (typical)	23 eps at -35C	**Interface**	USB 2.0
Digitization Clock	700 kHz, 2 MHz	**Data Bit Depth**	16 bit
Non-Linearity	<1%	**Channels**	1

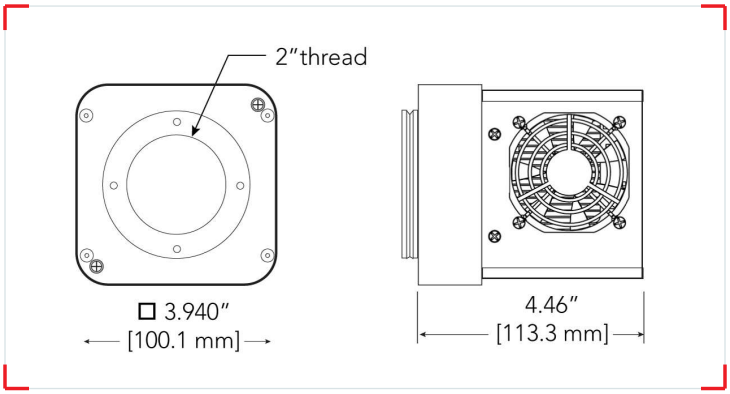
Shutter	25 mm; optional 45 mm	**Lens Mount**	C-mount; optional Nikon
Subarray Readout	Standard	**External Trigger In/Out**	Standard
SDK / Software	USB2 / FLIGrab	**Weight**	2.8 lbs (1.2 kg)
Environment	-30°C to 45°C | 10% - 90% Relative Humidity		

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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Request a quote for ML4710 AM

REQUEST A QUOTE

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MECHANICAL DRAWING

DEFAULT CONFIGURATION (Other Flanges Available)

