FINGER LAKES INSTRUMENTATION

MICROLINE CCD CAMERA

ML4720 UV.

DATASHEET flicamera.com/models/ml4720-uv

PRODUCT PAGE

MADE IN USA

The ML4720 UV uses a back-illuminated frame transfer CCD. Half of the sensor is covered with a metal mask; half is exposed to light. The exposed side of the sensor is centered in the camera aperture. The image is moved from the exposed side to the masked side in about 10 milliseconds. The UV version of this sensor cannot operate in inverted mode; dark current is much higher than the midband and broadband versions (see separate data sheet).



KEY SPECIFICATIONS

SENSOR	SIZE (MM)	RESOLUTION	PIXEL SIZE
e2v CCD47-20-1-170 (UV)	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	10e- at 500 kHz; 16e- at 4 MHz	15 eps at -30C	16 bit

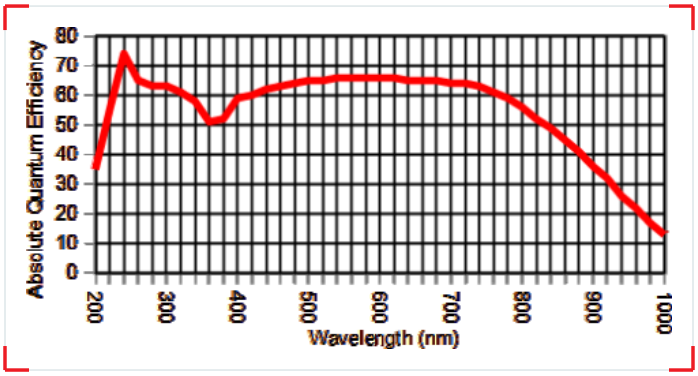
TECHNICAL DATA

Sensor Type	Back Illuminated Frame transfer CCD	**Sensor**	e2v CCD47-20-1-170 (UV)
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	10e- at 500 kHz; 16e- at 4 MHz	**Dynamic Range**	79.7 dB
Anti-Blooming	NA	**Cooling Method**	Air (Optional liquid)
Max. Cooling (Air)	55°C below ambient	**Temperature Stability**	0.1°C
Dark Current (typical)	15 eps at -30C	**Interface**	USB 2.0
Digitization Clock	500 kHz and 4 MHz per channel	**Data Bit Depth**	16 bit
Non-Linearity	<1%	**Channels**	2 (optional 1)

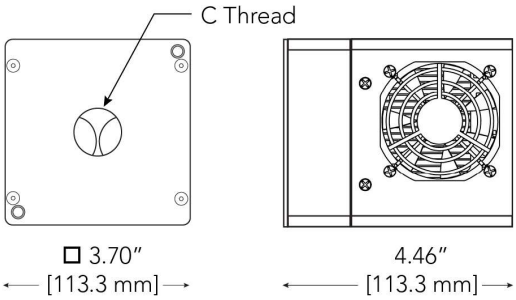
Shutter	Optional 25 mm	**Lens Mount**	C-mount; Nikon or Canon mount
Subarray Readout	Standard	**External Trigger In/Out**	Standard
SDK / Software	USB2 / FLIGrab	**Weight**	2.8 lbs (1.2 kg)
Environment	-30°C to 45°C | 10% - 90% Relative Humidity		

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 ML4720 UV

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