FINGER LAKES INSTRUMENTATION

MICROLINE CCD CAMERA

ML23042.

DATASHEET flicamera.com/models/ml23042

PRODUCT PAGE

MADE IN USA

The MicroLine ML23042 offers an outstanding combination of high quantum efficiency, large dynamic range, deep full well capacity, excellent cooling and large imaging area.



KEY SPECIFICATIONS

SENSOR	SIZE (MM)	RESOLUTION	PIXEL SIZE
e2v CCD230-42-1-143	30.7 X 30.7 mm (43.4 mm)	2048 x 2048	15 x 15 µm

FULL WELL	READ NOISE	DARK CURRENT	PEAK Q.E.
150000 electrons	16e at 750 kHz; 24e at 2 MHz	0.2 eps at -30C	96%

TECHNICAL DATA

Sensor Type	Back illuminated CCD
Active Pixels	2048 x 2048
Imaging Area (Diagonal)	30.7 X 30.7 mm (43.4 mm)
Typical Readout Noise	16e at 750 kHz; 24e at 2 MHz
Anti-Blooming	None
Max. Cooling (Air)	50°C below ambient
Dark Current (typical)	0.2 eps at -30C
Digitization Clock	750 kHz & 2 MHz
Non-Linearity	<1%

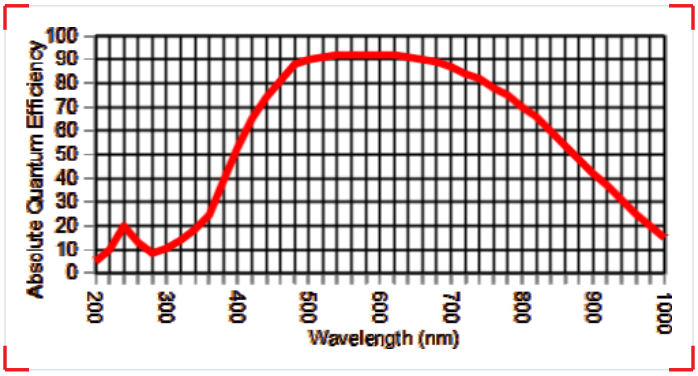
Sensor	e2v CCD230-42-1-143
Pixel Size (microns)	15 x 15 µm
Full Well Capacity (e-)	150000 electrons
Dynamic Range	79.1 dB
Cooling Method	Air (Optional liquid)
Temperature Stability	0.1°C
Interface	USB 2.0
Data Bit Depth	16 bit
Channels	2

Shutter	65 mm
Lens Mount	Optional Nikon F-mount or Canon EOS
External Trigger In/Out	Standard
Weight	4.5 lbs (2 kg)
Peak QE	96%

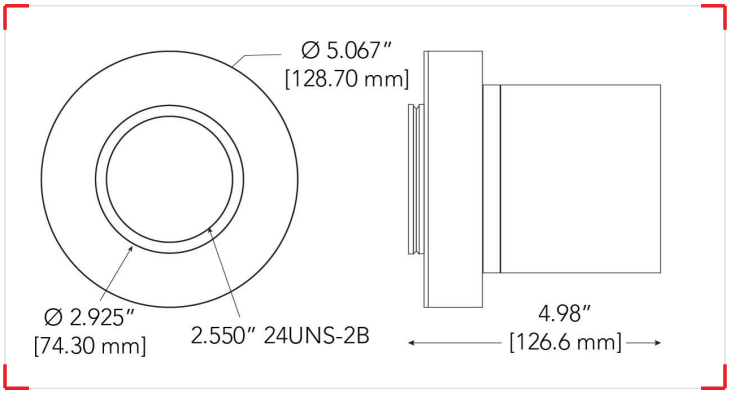
Default BFD	Long
Subarray Readout	Standard
SDK / Software	USB2 / FLIGrab
Environment	-30°C to 45°C | 10% - 90% Relative Humidity

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 ML23042

REQUEST A QUOTE

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MECHANICAL DRAWING

DEFAULT CONFIGURATION (Other Flanges Available)

