MicroLine CCD Camera

ML4710 AM

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.

Technical Data

Sensor Type Back Illuminated Deep Depletion CCD
Sensor e2v CCD47-10-1-197 (AM2, 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 100000 electrons

Typical_Readout Noise 11 e- RMS @ 700 kHz; 17e- at 2 MHz

Typical Gain 1.3 e-/counte-/ADU

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 Depth16 bitNon-Linearity<1%</th>Channels1

Shutter 25 mm; optional 45 mm

Lens Mount C-mount; optional Nikon

Subarray ReadoutStandardExternal Trigger In/OutStandardSDK / SoftwareUSB2 / FLIGrabWeight2.8 lbs (1.2 kg)

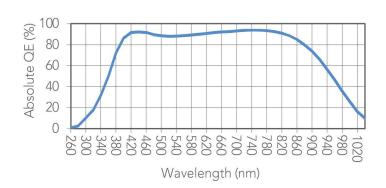
Environment -30°C to 45°C | 10% - 90% Relative

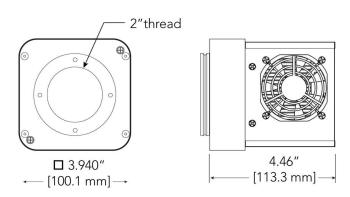
Power Humidit

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.



Absolute Quantum Efficiency





See www.flicamera.com for alternate configurations



Finger Lakes Instrumentation www.flicamera.com USA 585-624-3760