MicroLine CCD Camera

ML4710 DD

This version of the ML4710 uses a back-illuminated sensor on deep depletion silicon for enhanced near infrared sensitivity. Deep depletion silicon has substantially higher dark current than standard silicon.

Technical Data

Sensor Type Back Illuminated Deep Depletion (NIMO)

Sensor e2v CCD47-10-1-109

Active Pixels 1024×1024 Pixel Size (microns) $13 \times 13 \mu m$

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) 60°C below ambient

Temperature Stability 0.1°C

Dark Current (typical) 12 eps at -35C

Interface USB 2.0

Digitization Clock 700 kHz, 2 MHz (up to 4 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)

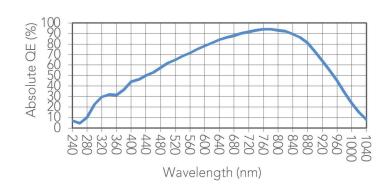
Environment -30°C to 45°C | 10% - 90% Relative

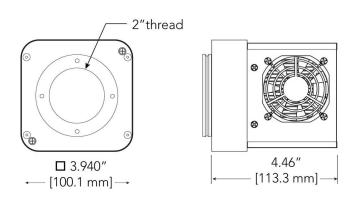
Power Humidity

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