MicroLine CCD Camera

ML4720

The ML4720 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 shifted under the mask in about 10 milliseconds.

Technical Data

Sensor Type Back Illuminated Frame Transfer CCD

Sensor e2v CCD47-20-1-339 (MB)

 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 13e- at 500 kHz; 18e- at 2 MHz

 Typical Gain
 2.4e-/ADU

 Dynamic Range
 79.7 dB

 Anti-Blooming
 None

Cooling Method Air (Optional liquid)

Max. Cooling (Air) 55°C below ambient

Temperature Stability 0.1°C

Dark Current (typical) 0.3 eps at -30C

Interface USB 2.0

Digitization Clock 500 kHz and 2 MHz per channel

Data Bit Depth16 bitNon-Linearity<1%</th>

Channels 2 (optional 1)
Shutter Optional 25mm

Lens Mount C-mount; Nikon or Canon mount

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

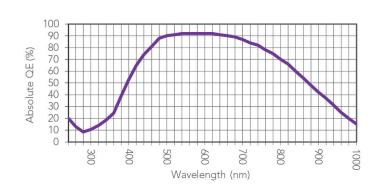
Environment -30°C to 45°C | 10% - 90% Relative

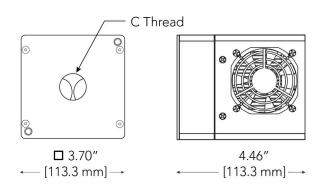
Power Humidit

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