Kepler CMOS Camera

KL4040 FI 65mm

4K x 4K at 23 fps

The KL4040 scientific CMOS camera has the same pixel size and imaging area as the popular KAF-16803 CCD, but with 1/3 the noise and 40% higher quantum efficiency. Kepler cooled sCMOS cameras provide ultra-high sensitivity, ultra-low noise, and high frame rates, all at game-changing price to performance ratio.

Technical Data

Sensor Type Front Illuminated CMOS
Sensor GPixel GSense4040

Shutter Type Rolling; Rolling with Global Reset

Active Pixels 4096×4096 Pixel Size (microns) $9 \times 9 \mu m$

Imaging Area (Diagonal) 36.8 X 36.8 mm (52 mm)

Full Well Capacity (e-) 70000 electrons

Typical Readout Noise 3.7 e-Dynamic Range 85.2 dB

Frame Rate (fps) 23 fps (QSFP V2)

Cooling Method¹ Air and Liquid

Max. Cooling (Air) 40°C below ambient

Temperature Stability 0.1°C

Dark Current (typical) 0.08 eps at -10C

Interface USB 3.0 (Optional QSFP²)

Data Bit Depth 16 bit³
Optional Shutter 65mm

Optional Mounts Medium Format Recommended (6x7)

Subarray Readout Standard

External Trigger In/Out Standard

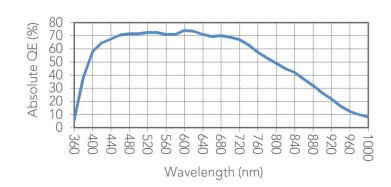
SDK / Software Kepler SDK / FLI Pilot

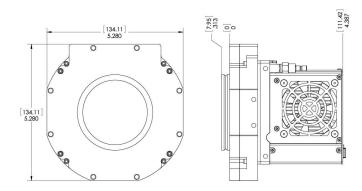
Weight 4 lbs (1.8 kg)



Shown with optional 65mm shutter housing

Absolute Quantum Efficiency





See FLIcamera.com for alternate configurations





Finger Lakes Instrumentation FLIcamera.com USA 585-624-3760

¹Liquid circulation connectors sold separately

² QSFP = Quad Small Form factor Pluggable: high speed fiber optic interface

³ 16-bit data merged from two 12 bit converters