Kepler CMOS Camera

KL4040 BI

4K x 4K at 23 fps

The KL4040 BI scientific CMOS camera has the same pixel size and imaging area as the popular KAF-16803 CCD, but with 1/4 the noise, 90% peak quantum efficiency, and excellent sensitivity in the UV. 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 Back Illuminated CMOS
Sensor GPixel GSense4040BSI

 Shutter Type
 Rolling

 Active Pixels
 4096 x 4096

 Pixel Size (microns)
 9 x 9 µm

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

Full Well Capacity 39000 electrons

Typical Readout Noise 2.3 e-Dynamic Range 84.2 dB

Frame Rate 23 fps (QSFP V2)

Cooling Method¹ Air and Liquid

Max. Cooling (Air) 40°C below ambient

Temperature Stability 0.1°C

Dark Current (typical) 0.4 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

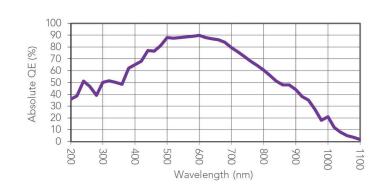
SDK / Software Kepler SDK / FLI Pilot

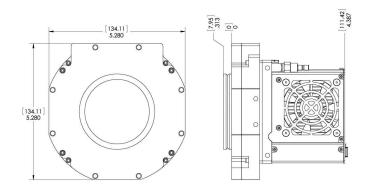
Weight 4 lbs (1.8 kg)



Shown with optional 65mm shutter housing

Absolute Quantum Efficiency





See www.flicamera.com for alternate configurations



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