

# Kepler CMOS Camera

## KL400 FI

### 1.5 e- Noise RMS

The Kepler KL400 FI provides high sensitivity, ultra-low noise with high frame rates, all at a game-changing price to performance ratio. The front illuminated version does not have microlenses.

#### Technical Data

<b>Sensor Type</b>	Front Illuminated CMOS
<b>Sensor</b>	GPixel GSense400
<b>Shutter Type</b>	Rolling
<b>Active Pixels</b>	2048 x 2048
<b>Pixel Size (microns)</b>	11 x 11 $\mu\text{m}$
<b>Imaging Area (Diagonal)</b>	22.5 X 22.5 mm (31.8 mm)
<b>Full Well Capacity (e-)</b>	120000 electrons
<b>Typical Readout Noise</b>	1.5 e-
<b>Dynamic Range</b>	97.7 dB
<b>Frame Rate</b>	24 fps (Rolling HDR)
<b>Cooling Method<sup>1</sup></b>	Air and Liquid
<b>Max. Cooling (Air)</b>	45°C below ambient
<b>Temperature Stability</b>	0.1°C
<b>Dark Current (typical)</b>	0.15 eps at -20C
<b>Interface</b>	USB 3.0 (Optional QSFP <sup>2</sup> )
<b>Data Bit Depth</b>	16 bit <sup>3</sup>
<b>Optional Shutter</b>	45 mm
<b>Optional Mounts</b>	Nikon or Canon
<b>Subarray Readout</b>	Standard
<b>External Trigger In/Out</b>	Standard
<b>SDK / Software</b>	Kepler SDK (Open Source) /
<b>Weight</b>	3 lbs (1.3 kg)

<sup>1</sup> Liquid circulation connectors sold separately

<sup>2</sup> QSFP = Quad Small Form factor Pluggable: high speed fiber optic interface.

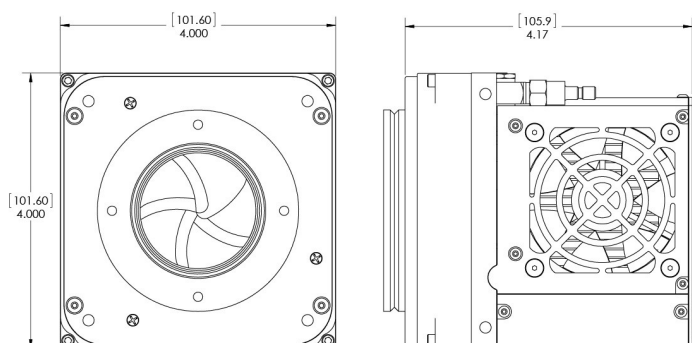
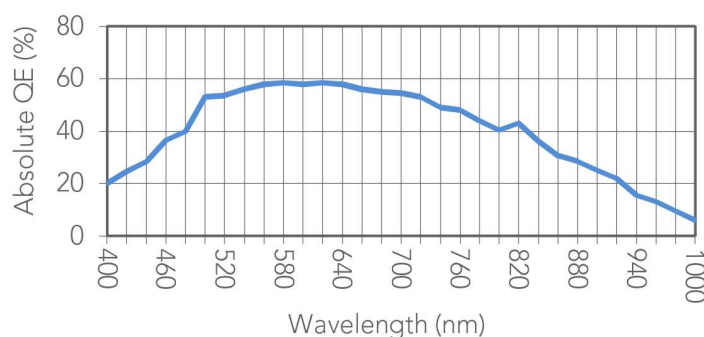
Support for KL400 in Q2 2020.

<sup>3</sup> 16-bit data merged from two 12 bit converters



Also available with 45mm shutter

#### Absolute Quantum Efficiency



See [www.fliccamera.com](http://www.fliccamera.com) for alternate configurations



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