



Kepler Cooled Scientific CMOS Cameras

The Ultimate in Sensitivity

Preliminary Data Sheet

KL400: 95% Peak QE, 1.3 e- Noise RMS

The Kepler KL400 sCMOS camera represents the first release in a new family of Scientific CMOS cameras from Finger Lakes Instrumentation. The KL400 provides ultra-high sensitivity, ultra-low noise with high frame rates; all at game-changing price to performance ratio.

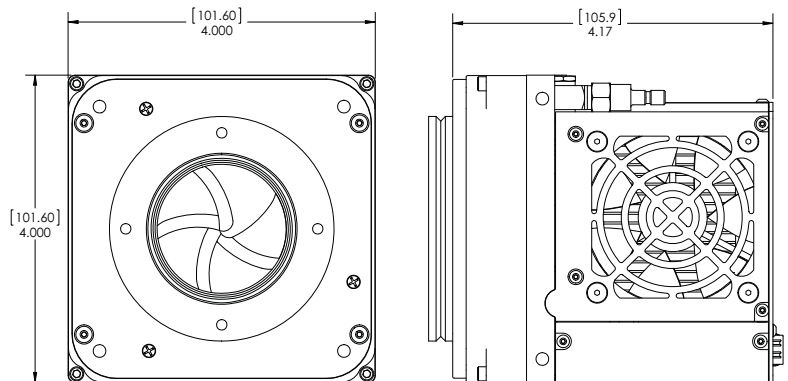
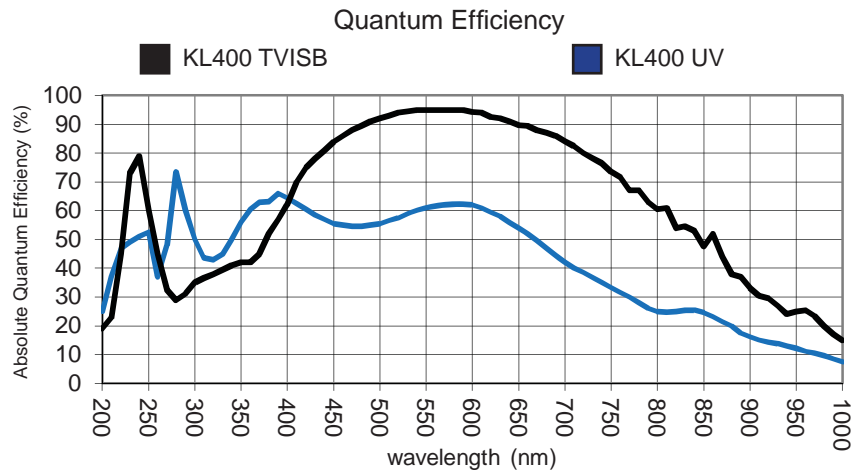


KL400 with Optional 43mm Shutter
Air & liquid cooling (standard)

Sensor Type	Back illuminated
Active Pixels	2048 x 2048
Pixel Size (microns)	11 x 11
Effective Area	22.5 x 22.5 mm
Sensor Diagonal	31.9 mm
Full Well Capacity	89000 electrons
Frame rate (rolling)	48 fps
	24 fps HDR
Read Noise (rolling)	1.5 e- HDR
Dynamic Range	96 dB HDR
Peak QE	94%
Cooling	Air and Liquid
Maximum Cooling (Air)	60°C Below Ambient
Dark Current	0.4 eps at -20C
Interface	USB 3.0
Interface (Optional)	SFP ¹
Data Bit Depth ²	16 bit
Mount	F-mount
Video size	2.0"
Subarray Readout	Yes
Electromechanical Shutter	Optional
Ex Trigger In	Yes
Ex Trigger Out	Yes
Software	FLI

Applications:

- Orbital Debris Detection
- Photocell Inspection
- Forensic Sciences
- Super-Resolution Microscopy
- Confocal Microscopy
- Light Sheet Microscopy
- TIRF and G



¹ SFP = Small Form factor Pluggable: high speed fiber optic interface

² 16-bit data merged from two 12 bit converters

Quality. Cooled. Cameras.

www.fingerlakesinstrumentation.com eho imaging