

MicroLine ML09000

Quality. Cooled. Cameras.

3056 x 3056 Imaging Array

12 μ m Pixel Size

At 3.7 x 3.7 x 4.8 inches the MicroLine is a small camera with big camera capabilities. Each component of the MicroLine camera is designed and manufactured for a long life in the most demanding conditions. MicroLine download speeds are fast yet maintain the 16-bit resolution necessary to produce high quality images. MicroLine cameras can achieve up to 60°C below ambient cooling without water assist. Simply set the MicroLine cooling where you want it and the camera will do the rest, quickly and without worries.



Features

Benefits

Up to 8 MHz Digitization Speed

Fast Image capture with full 16-bit resolution

3056 x 3056 Array with 12 μ m pixels

Resolves fine detail

Flexible binning and readout

Increases frame rate

Thermoelectric Cooling to 50°C Below Ambient

Excellent low-noise imaging

Excellent quantum efficiency

High sensitivity for fast image acquisition

Optional Nikon F-mount or Canon lens mount

Wide variety of optical choices

Acquisition software included

Ease of integration with open source SDK

USB 2.0 interface

Industry standard connectivity; fast data transfer



Engineering Excellence

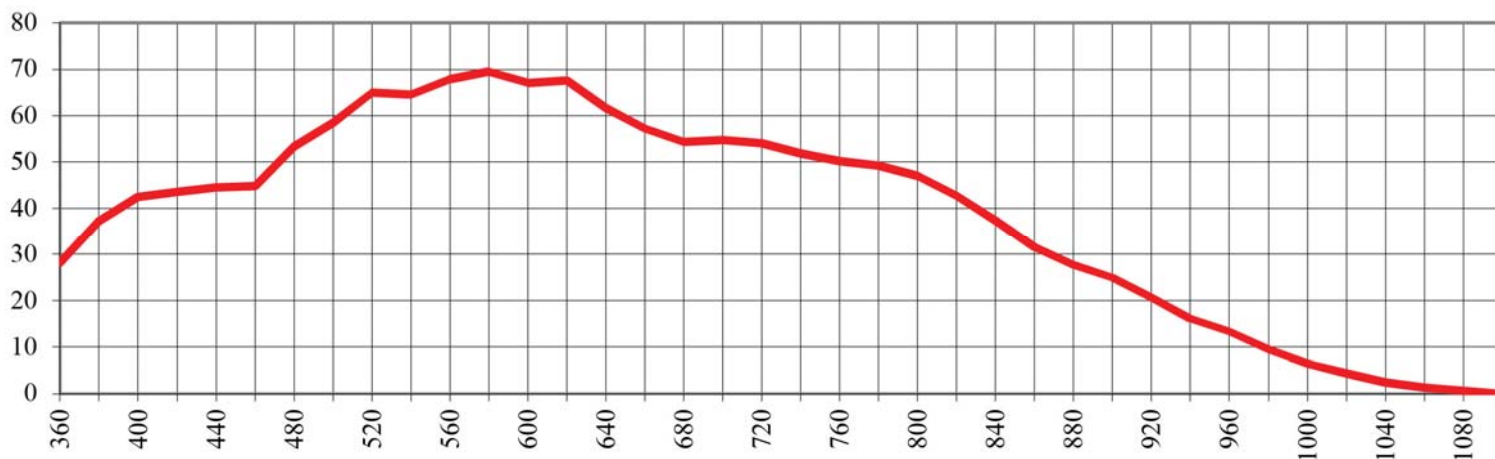
Because Your Image Depends On It.

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Sensor Specifications (from manufacturer)

Sensor	On Semi KAF-09000	Sensor Size	36.6 X 36.6 mm	Megapixels	9
Pixels	3056 x 3056	Sensor Diagonal	51.7 mm	Video Size (inch)	3.2
Pixel Size	12 μ m	CCD Variants			
Full Well Capacity	110,000 electrons	CCD Grades	Standard		
Color Options	Monochrome only	Anti-Blooming	100X		
CCD Type	Full frame				

Sensor Quantum Efficiency (Absolute)



Camera Performance

Typical Maximum Cooling	50°C below ambient	Dark Current (typical)	0.03 electrons/pixel/sec at -30°C
Temperature Stability	0.1°C	Cooling Method	Air (Optional liquid)
Digitization Speed	1 MHz and 8 MHz (software selectable)		
Typical System Noise	11e- @ 1 MHz & 16e- @ 8 MHz	Non-Linearity	<1%
Housing Dimensions	5.1 X 5.1 X 4.77 inches (12.9 X 12.9 X 12.1 cm)	Weight	4.5 lbs (2 kg)
Focal Plane to Face Plate	21 mm		
Lens Mounts	Optional Nikon F-mount or Canon mount		
Interface	USB 2.0	Camera Channels	1
Available Shutters	65 mm	Shutter MTBF	1000000
External Triggering	Standard		
Environment	-30°C to 45°C 10% - 90% Relative Humidity		
Power	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.		



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