# 4008 x 2672 Imaging Array

## 9 µm 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
2 MHz and 12 MHz digitization	Fast Image capture with full 16-bit resolution
4008 x 2672 Array with 9 μm pixels	Resolves fine detail
Flexible binning and readout	Increases frame rate
Thermoelectric Cooling to 55°C Below Ambient	Excellent low-noise imaging
Excellent quantum efficiency	High sensitivity for fast image acquisition
Optional Nikon F-mount and Canon EOS 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.

1250 Rochester St. Lima NY 14485 · USA 585 624 3760 sales@flicamera.com www.flicamera.com

Megapixels 10.7

Video Size (inch) 2.7

### **Sensor Specifications (from manufacturer)**

Sensor On Semi KAI-11002

Pixels 4008 x 2672

Pixel Size 9 µm

Full Well Capacity 60,000 electrons

Color Options Mono or Color **CCD Type** Interline transfer Sensor Size 36 X 24 mm

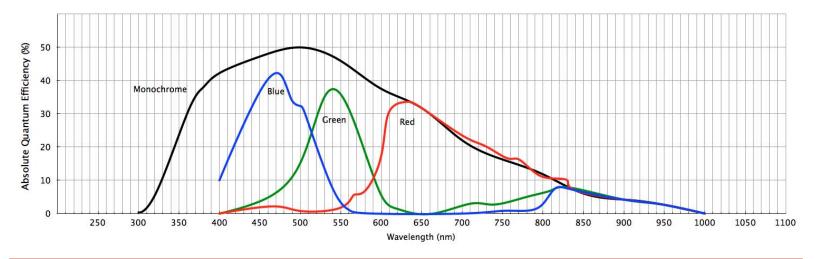
Sensor Diagonal 43.2 mm

**CCD Variants** 

**CCD Grades** 0, 1, 2

Anti-Blooming 1000X

#### **Sensor Quantum Efficiency (Absolute)**



#### **Camera Performance**

Typical Maximum Cooling 55°C below ambient Dark Current (typical) 0.004 electrons/pixel/sec at -35°C

Temperature Stability 0.1°C Cooling Method Air (Optional liquid)

Digitization Speed 2 MHz and 12 MHz

Typical System Noise 9 e- at 2 MHz; 14 e- at 12 MHz Non-Linearity <1%

**Housing Dimensions** 3.7 X 3.7 X 4.77 inches (9.3 X 9.3 X 12.1 cm) Weight 3.96 lbs (1.8 kg)

Focal Plane to Face Plate 15.7mm (21mm with optional shutter)

Lens Mounts Optional Nikon F-mount or Canon EOS Mount

Interface USB 2.0 Camera Channels 1 (optional 2)

Available Shutters Optional 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.



### **Engineering Excellence**

Because Your Image Depends On It.

1250 Rochester St. Lima NY 14485 · USA 585 624 3760 sales@flicamera.com www.flicamera.com