

640 x 480 Imaging Array Size

7.4 μm Pixel Size

At 3.7 x 3.7 x 5 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 achieves a minimum of 60° C sustainable cooling without water assist. Simply set the MicroLine cooling where you want it and the camera will do the rest, quickly and without worries.



MicroLine with a Fast 45mm Shutter

Applications

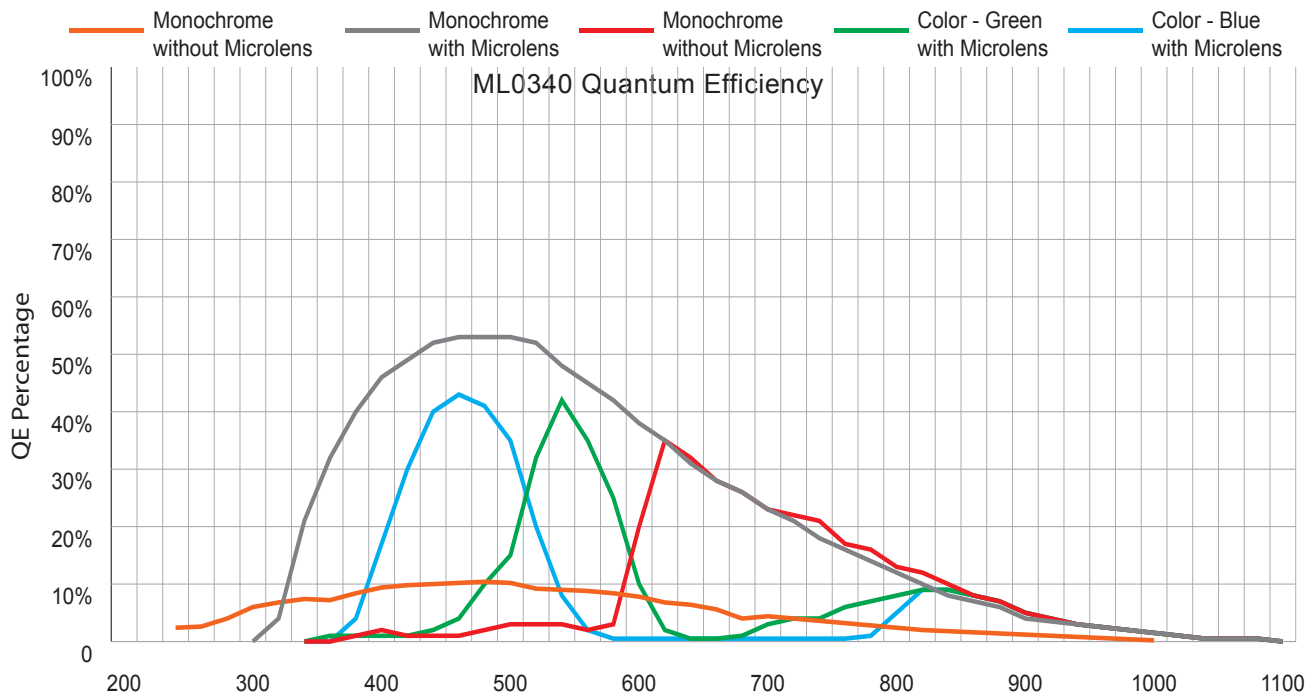
- Digital Radiography
- Astronomy
- Bioluminescence
- Chemoluminescence
- Gel Documentation
- Forensic Imaging
- Satellite Imaging
- Low Light Level Imaging

Features	Benefits
12 MHz Download Speed	Fast image capture with full 16-bit resolution
640 x 480 Array Size / 7.4 μm Pixel Size	Resolves fine detail
Flexible Binning and Readout	Increases frame rate
Thermoelectric Cooling to -60° C	Excellent low-noise imaging
Excellent Quantum Efficiency	High sensitivity
C-Mount and F-Mount Compatible	Offers a wide variety of optical choices
Acquisition Software	Supplied with camera and includes our open source SDK
USB 2.0 Interface	Industry standard connectivity, fast data transfer



Finger Lakes Instrumentation

Quality. Cooled. Cameras.



ML0340 Specifications

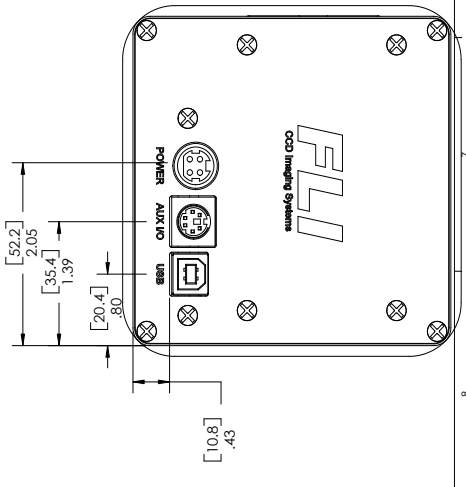
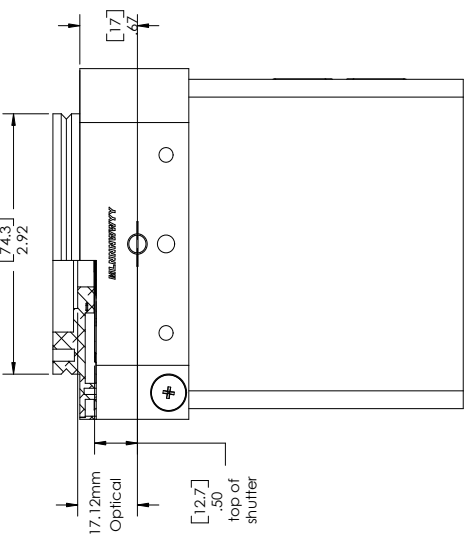
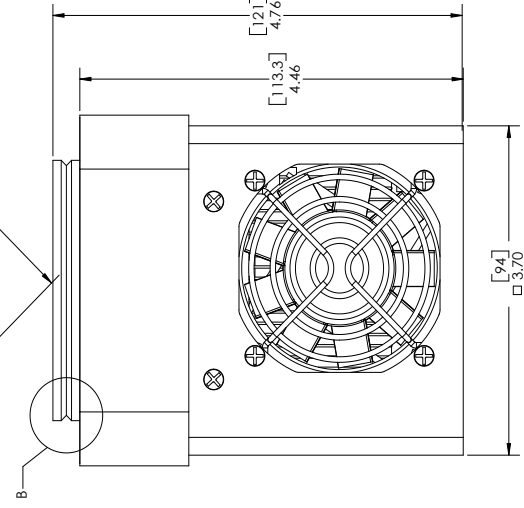
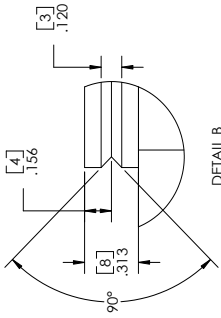
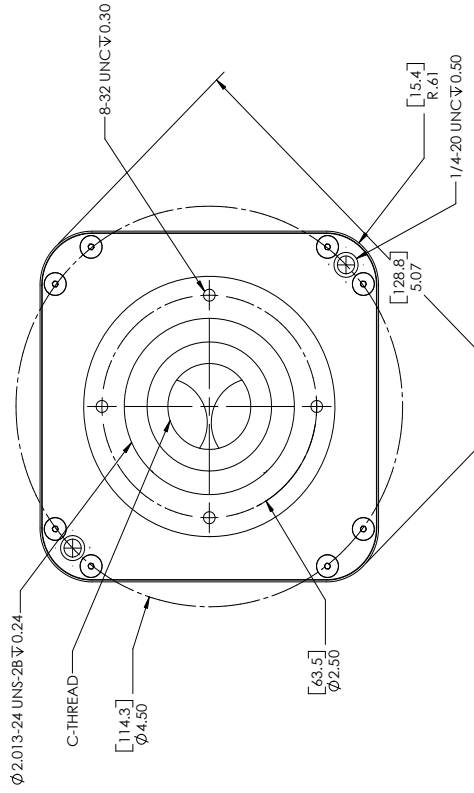
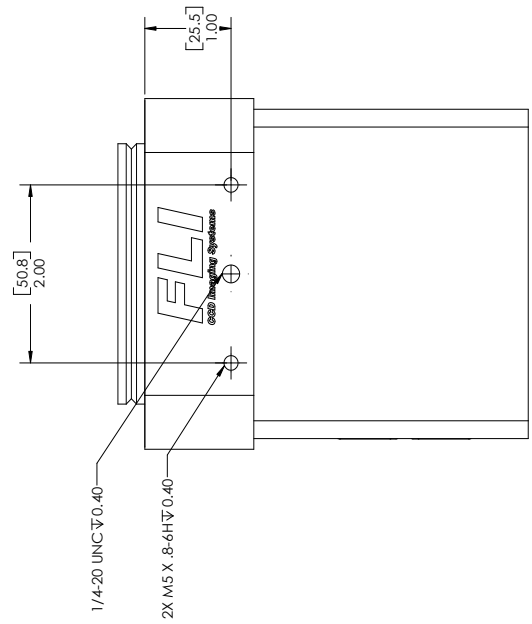
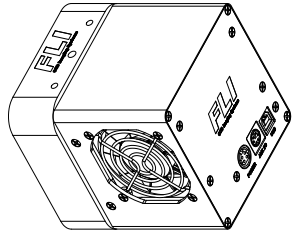
Sensor	KAI-0340
Array Size	640 x 480
Pixel Size	7.4 μm
Typical Minimum Cooling	-60° C Below Ambient
Typical Download Speed @ 16-bit	12 MHz (other speeds available)
Typical System Noise	8 e- RMS @ 12 MHz
Nonlinearity	<1%
Temperature Stability	0.1° C
Operating Environment	-30° C - 45° C 10% - 90% Relative Humidity
Sensor Manufacturer	Kodak
CCD Grades Available	Standard
CCD Type	Interline
Color/Monochrome	Color and Monochrome
Mega Pixels	.30
Sensor Diagonal	5.9 mm
Linear Full Well	40,000 e-
Typical Dark Current	<0.08 e-/pixel/sec. @ -35° C
Anti Blooming	300x
Available Shutters (Optional)	25 mm (Sensor has an electronic shutter)
Shutter MTBF	1,000,000
Remote Triggering	Standard
Power	12v
Interface	USB 2.0
Dimensions	3.70 x 3.70 x 4.77 (94 x 94 x 121.3)

* Due to continuous development all specifications subject to change



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REV	DESCRIPTION	DATE
1	ASSEMBLY DRAWING	05/14/06
2	CHANGE TO SPEECH HOUSING	04/20/10



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	PN:
DIMENSIONS ARE IN INCHES		DRAWN	REC	05/14/06
ANGULAR DIMENSIONS ARE IN DEGREES		CHECKED		TITLE:
TOLERANCES UNLESS OTHERWISE SPECIFIED:		ENG APPR.		ASSEMBLY: ASY_MLQ_25MM_AC
FRACTIONS: 1/16, 1/32, 1/64		MANUFACTURING APPR.		
DECIMALS: .001, .002, .005, .010, .015, .020, .030, .040, .050, .060, .070, .080, .090, .100, .125, .150, .175, .200, .250, .300, .375, .400, .500, .625, .750, .875, 1.000		G.A.		
SURFACE FINISH: UNLESS OTHERWISE SPECIFIED, ALL SURFACES SHALL BE FINISHED TO A 32-RMS FINISH.		PROPRIETARY AND CONFIDENTIAL		
MATERIAL: UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE STANDARD GRADE, UNLESS OTHERWISE SPECIFIED.		THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE AND IS NOT TO BE RELEASED OR DISSEMINATED IN ANY MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLI.		
FINISH: UNLESS OTHERWISE SPECIFIED, ALL SURFACES SHALL BE FINISHED TO A 32-RMS FINISH.		SIZE: C		
DO NOT SCALE DRAWING		COMMENTS: B		
		SCALE: 1:1 WEIGHT: SHEET 1 OF 1		