



## Features

- High QE CCD: >55% @500nm
- Resolution: 640 X 480 at up to 109 f/sec
- Interline Progressive Scan CCD
- 12 Bit Digitization
- Dual speed readout: 40 and 20 MHz
- "C" Lens Mount
- Long Term Exposure
- High Signal to Noise Ratio
- Variable, On-Chip Region of Interest and Binning
- Flexible Exposure and Readout Modes
- Gigabit Ethernet or Camera Link Interface
- DVCView™ Image Capture and Control Software
- SDK for Windows and Linux
- Software and External Asynchronous Triggers
- No Mechanical Shutter Required
- CE / UL / CUL / FCC Certified
- RoHS Compliant



## Description

The DVC-340M is a versatile, high-performance digital camera with functions tailored to high throughput scientific and industrial applications. It is capable of both high-speed readout (40 MHz pixel rate) and low noise readout (20 MHz pixel rate) at 12 bits.

The DVC-340M utilizes a Kodak KAI-340M progressive scan interline CCD. The high quantum efficiency of the CCD peaks in the 500-600 nm region of the spectrum, resulting in optimum sensitivity for most applications.

The DVC-340M has four basic operating modes: streaming overlapped exposure, streaming non-overlapped exposure, edge-triggered single-frame snapshot, and variable pulse-width exposure. Each mode can be operated at either 20 or 40 MHz and can support binning and region of interest operation.

DVCView™ application software is provided with the camera for real-time viewing and image capture. A multi-platform SDK is available to developers, streamlining integration of all DVC cameras via the DVC API.

# SPECIFICATIONS

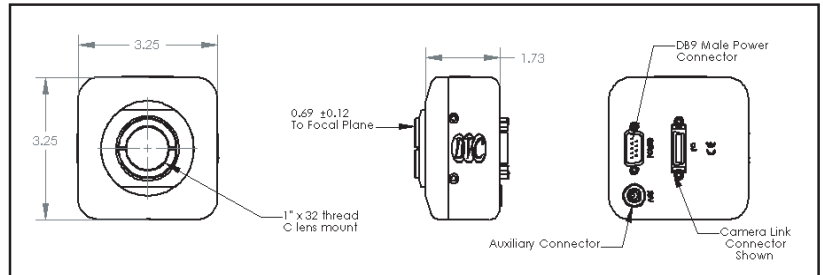
# DVC-340M

## CCD

KAI-0340M progressive-scan Interline CCD

Active Pixels	640 X 480
Pick Up Area	7.4 $\mu\text{m}$ X 7.4 $\mu\text{m}$
Pixel Size	5.92 $\mu\text{m}$ (diagonal)
Aspect Ratio	4:3
QE	> 55% @ 500 nm
Full Well	38,000e <sup>-</sup> @ 20 MHz 20,000e <sup>-</sup> @ 40 MHz

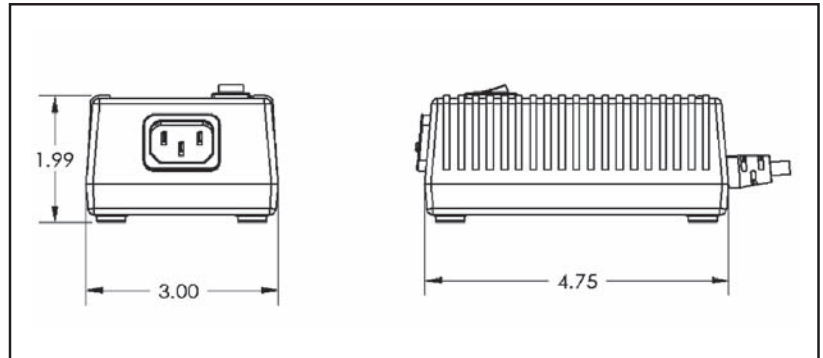
## 340M (shown with Gigabit Ethernet connector)



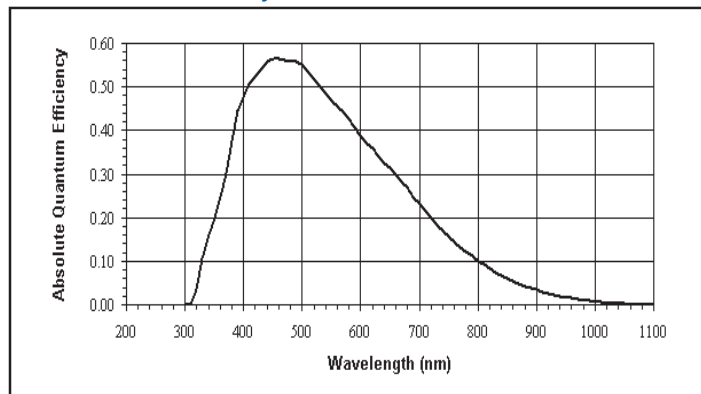
## Digital Video

I/O	12-Bit Camera Link or Gigabit Ethernet			
Readout Rate	20 MHz @ 12-bits 40 MHz @ 12-bits			
Read Noise	< 12e <sup>-</sup> @ 20 MHz			
Binning (selected examples)			20MHz	40MHz
	1X1	640 X 480	55	109
	1X2	640 X 240	109	206
	2X2	320 X 240	109	206
	3X3	213 X 160	160	305
4X4	160 X 120	205	374	
ROI (selected examples)			20MHz	40MHz
	240 X 240		109	209
	120 X 120		206	382
	60 X 60		368	639
Gain Control Range	35 dB			
Offset Control (Black)	0% to 6% in 256 steps			
Exposure Range	50 $\mu\text{s}$ to 1 hour			

## RoHS Compliant Switchmode Power Supply



## CCD Quantum Efficiency



## Electrical

Input Voltage	110/220 VAC 50/60 Hz
Power	< 5 Watts

## Mechanical

Size	3.25" (H) X 3.25" (W) X 1.73" (L)
Weight	18 oz (505 grams)
Lens Mount	C-Mount
Camera Mount	1/4" X 20 Standard Tripod mount
Camera Connector	Camera Link or Gigabit Ethernet
Power Connector	DB-9M

## IR Filter Response

