



Features

- High QE CCD: >45% @500nm
- 16-Megapixel Resolution
- Interline, Progressive Scan CCD
- 12-Bit Digitization
- Single or Dual-tap Readout: 40 and 20 MHz
- Low Read Noise
- "F" Lens Mount
- High Signal to Noise Ratio
- Optional Single-Stage Cooling
- Variable, On-chip Region of Interest and Binning
- No Mechanical Shutter
- Flexible Exposure and Readout Modes
- Software and External Asynchronous Triggers
- DVCView™: Image Capture and Control Software
- Windows/Linux API
- CE / UL / CUL / FCC Certified
- One-piece Optical Coupling with Internal Light Baffle
- RoHS Compliant



Description

The DVC-16000M is a 16-megapixel, high sensitivity digital camera that utilizes the Kodak KAI-16000 progressive-scan, interline CCD sensor. With 7.4 micron square pixels, very low noise, and a peak quantum efficiency of 45%, the DVC-16000M is the camera of choice for demanding scientific and industrial applications.

The DVC-16000M has four basic operating modes: streaming overlapped exposure, streaming non-overlapped exposure, edge-triggered single-frame snapshot, and variable pulse-width exposure.

The DVC-16000M is fully supported in our multi-platform SDK, which enables the streamlined integration of all DVC products into any system. The DVCView™ real-time viewing and image capture application also provides complete support for the DVC-16000M.

Specifications

CCD

KAI-16000 progressive scan interline CCD

Active Pixels	4872 X 3248
Pixel Size	7.4 μm X 7.4 μm (sq. format)
Imager Size	43.3mm (diagonal)
Aspect Ratio	3:2
Peak QE	>45%
Full Well	30,000e- @ 20 MHz 20,000e- @ 40 MHz

Digital Video

I/O	12-bit dual-port Gig-E or dual-port Camera Link		
A/D Converter 1 A/D Converter 2	12-bit single or dual-port, 20 or 40 MHz		
Read Noise	14e- @ 20 MHz		
Binning selected examples, dual-port frame rates		20MHz	40MHz
	1X1	4872 X 3248	2.0 3.5
	2X2	2436 X 1624	3.5 5.5
	3X3	1624 X 1083	4.6 6.8
	4X4	1218 X 812	5.5 7.7
ROI selected examples, dual-port frame rates		20MHz	40MHz
	2048 X 2048	3.0	4.8
	1024 X 1024	4.8	7.0
	512 X 512	7.0	9.1
	256 X 256	8.9	11.6

Electrical

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

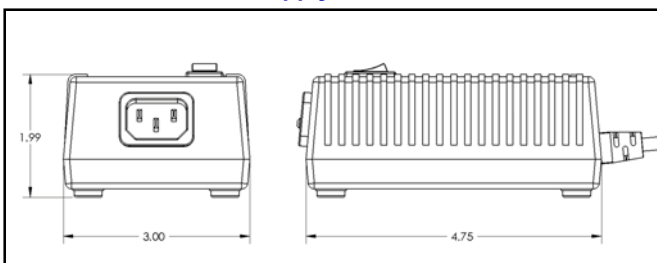
Mechanical

Size	3.25" (H) X 3.25" (W) X 3.11" (L)
w/T-1 Cooler	4.30" (H) X 4.30" (W) X 3.92" (L)
Weight	18 ozs. (505 grams)
Lens Mount	F-mount with internal light baffle
Camera Mount	1/4" X 20 Standard Tripod mount
Camera Connector	Camera Link or Gigabit Ethernet
Power Connector	DB-9M

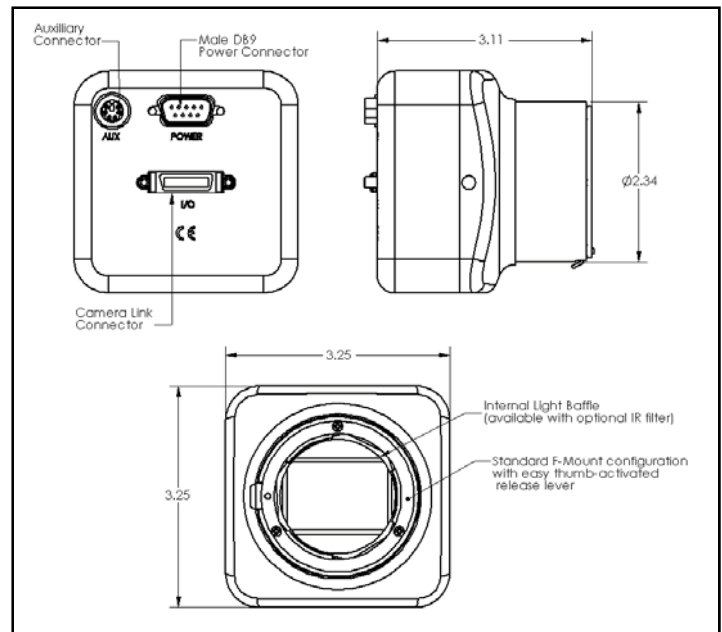
Camera Control DVCView™ standard

Gain Control Range	35 dB
Offset Control (black)	0% to 6% in 256 steps
Exposure Range	85 μs to 1 hour

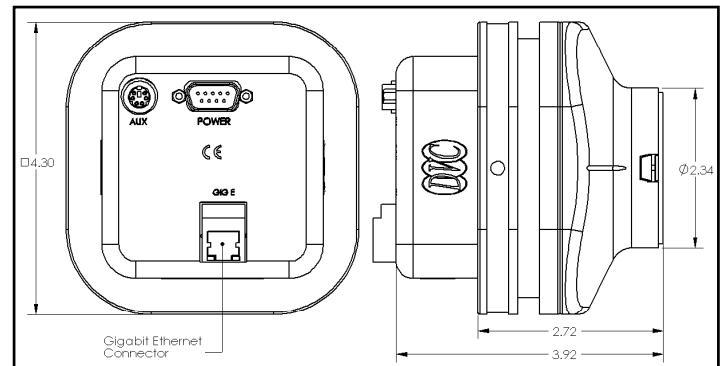
Switchmode Power Supply



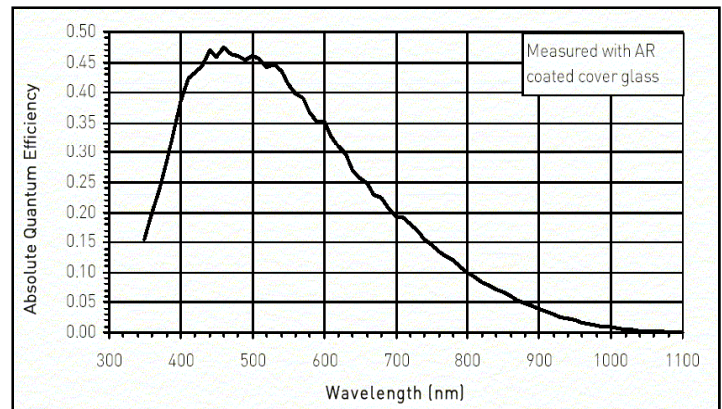
16000M



16000M-T1



CCD Quantum Efficiency



IR Filter Response

