



Features

- High QE CCD: >55% @500nm
- 2 Megapixel Resolution: 1600 X 1200
- Interline, Progressive-Scan CCD
- 12-Bit Digitization
- Dual A/D Converters: 40 and 20 MHz
- Low Read Noise
- Optional 1-Stage or 2-Stage TE Cooler
- "C" Lens Mount
- 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-2000C is a high-resolution digital camera utilizing the Kodak KAI-2020C progressive-scan interline CCD sensor. The quantum efficiency of the CCD peaks in the 500-600nm region of the spectrum, resulting in optimum sensitivity for most applications.

RGB color is derived by use of an on-sensor Bayer filter pattern that minimizes loss of light and resolution. The highly stable optical mount utilizes adjustable C-mount coupling to provide critical system focusing adjustments.

The camera is supplied with *DVCView™*, a Windows 2000/XP software program for real-time viewing and image capture. *DVCView™* allows the user to control all camera functions including variable ROI readout to provide faster frame rates without loss of resolution. Also included are image averaging and background correction. *DVCView™* provides 5 user-programmable single-click application controls. A multi-platform SDK is available to developers, streamlining integration of all DVC cameras via the DVC API.

SPECIFICATIONS

DVC-2000C

CCD

KAI-2020C progressive-scan interline CCD

Active Pixels	1600 X 1200
Pixel Size	7.4 μm X 7.4 μm (sq. format)
Imager Size	14.8 mm (diagonal)
Aspect Ratio	4:3
Peak QE	> 55%
Full Well	38,000e ⁻ @ 20 MHz 20,000e ⁻ @ 40 MHz

Digital Video

I/O	12-Bit Camera Link or Gigabit Ethernet			
A/D Converter	20 MHz @ 12-bits 40 MHz @ 12-bits			
Read Noise	12 e ⁻ @ 20 MHz			
Binning (for monochrome operation only)		20MHz	40MHz	
	1X1 1600 X 1200	9	18	
	2X2 800 X 600	17	32	
	4X4 400 X 300	32	53	
	8X8 200 X 150	52	78	
ROI (selected examples)		20MHz	40MHz	
	800 X 600	18	32	
	400 X 300	32	54	
	200 X 150	54	81	
Gain Control Range	35 dB			
Offset Control (Black)	0% to 6% in 256 steps			
Exposure Range	50 μs to 1 hour			

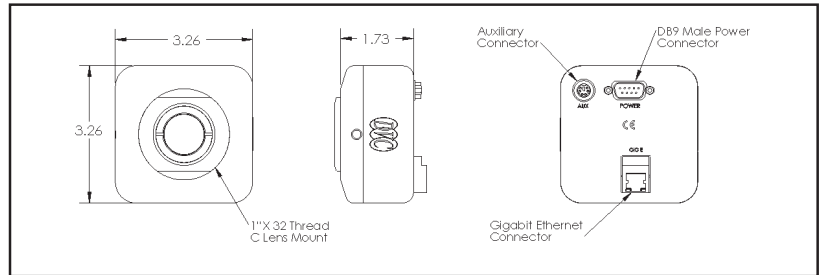
Electrical

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

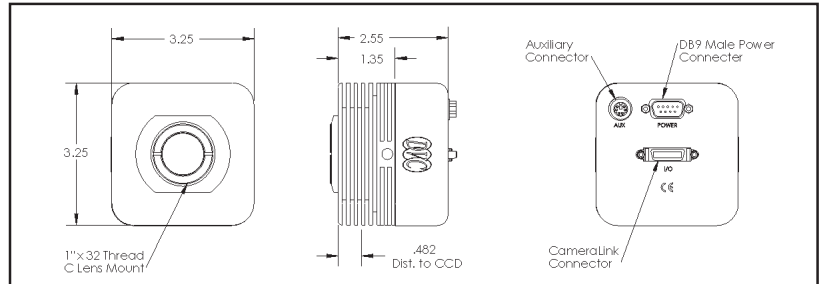
Mechanical

Size	3.25" (H) X 3.25" (W) X 1.73" (L)
W/T1 Cooler	3.25" (H) X 3.25" (W) X 2.56" (L)
W/T2 Cooler	3.90" (H) X 3.90" (W) X 2.56" (L)
Weight	18 oz (505 grams)
W/T1 Cooler	30 oz (900 grams)
W/T2 Cooler	38 oz (1077 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

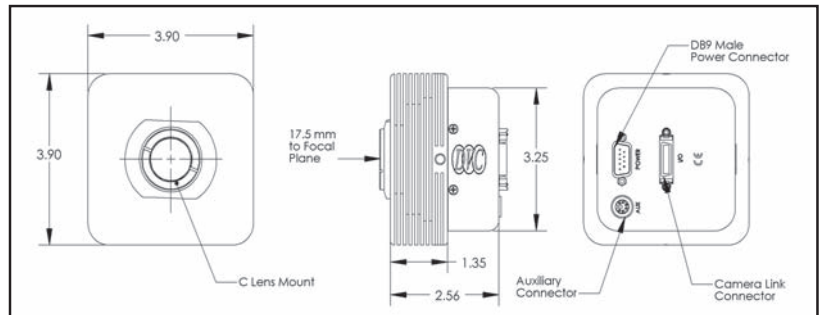
2000C (shown with Gigabit Ethernet connector)



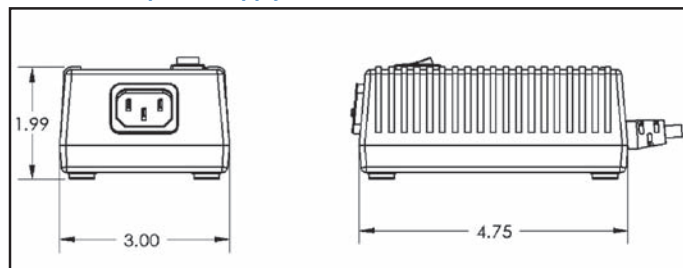
2000C-T1 Cooled (shown with Camera Link connector)



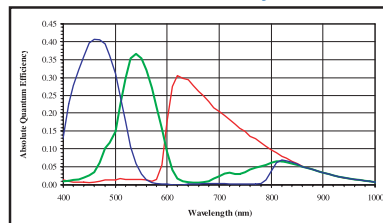
2000C-T2 Cooled (shown with Camera Link connector)



Switchmode power supply



CCD Quantum Efficiency



IR Filter Response

