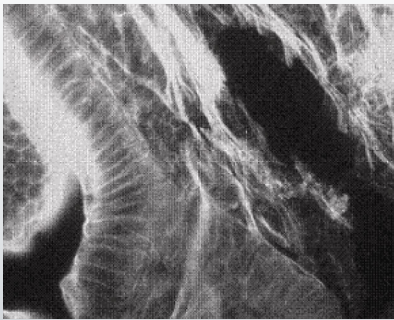


AU-140CL-CCD DIGITAL MICROSCOPY CAMERA

Ideal for low light fluorescence applications, the cooled CCD USB 2.0 cameras offer cooling to 25°C below ambient. The Sony ICX285 ExView HAD sensor has a very dynamic range, excellent sensitivity and a 12-bit digital output. Designed to be used for a variety of applications, both color and monochrome models are available.

With 1392x1040 resolution and on-board processing, these cameras deliver outstanding image quality and value for industrial and scientific imaging applications



Uncompressed images in live streaming video and still-image capture are provided across a USB 2.0 digital interface. No framegrabber is required. Hardware and software based synchronization trigger is available as an option provided. On-board memory is available for frame buffering. The cooled CCD model cameras are offered in both enclosed and board-level form. Custom form factor (sizes) can be provided.

Every INFINITY AU camera includes **INFINITY ANALYZE** software for advanced camera control, image processing, measuring and annotation, and is supported by an experienced team of technical support and imaging experts.

We understand your imaging needs and are here to help you get the most out of your camera.



Performance Features

- The high-speed USB 2.0 interface eliminates a framegrabber and facilitates ease of installation on both laptop and desktop computers
- Available in color or monochrome
- Cooled feature reduces thermal noise during low light fluorescent imaging
- Low noise characteristic of the AU-140CL-CCD progressive scan 1.4 megapixel CCD image sensor results in crisp color quality for the most demanding brightfield, phase contrast, and fluorescent applications including GFP, FISH, NIR, FRET, life science and geology
- Full color sub-windowing allows for rapid focus and scanning of samples: 15 fps at full 1392x1040 resolution
- Select 8 & 12-bit pixel data modes
- The RGB data captured through each pixel contains 30-bits of color image information resulting in 1024 intensity values
- Camera control through an intuitive user TWAIN interface results in rapid image capture archiving and documentation for high throughput applications, demanding research environments and teaching facilities
- The INFINITY AU-140CL-CCD has a compact design equipped with a C-Mount facilitating installation on all microscope configurations including upright, inverted and stereo
- AU INFINITY cameras are software compatible with Windows™ 2K, XP, Vista and Mac OS 10.4 operating systems

ACCU-SCOPE®
Quality thru Vision

UNITRON®
EXCELLENCE BY DESIGN
SINCE 1952

Specifications — AU-140CL-CCD

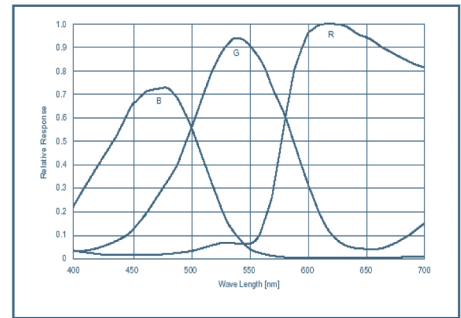
Camera Sensor

Image Sensor	Sony ICX285 2/3" format, 1.4 megapixel color or monochrome progressive scan CCD sensor
Effective Pixels	1392x1040, 1.4 million pixels
Frame Rate	15 fps at 1392 x 1040, increased with binning and ROI
Digital Output	8 and 12-bit
Dark Current (e-/s)	0.15 electrons / pixel / s when cooled
Pixel Size	6.45µm X 6.45µm
Full Well Capacity	>18,000 electrons
Read Noise	8 e- rms
Cooling Type	Hermetically sealed and dry gas filled Peltier cooling To 25°C below ambient
Readout Frequency	28.6 MHz
Dimensions (L x W x H)	3.85 x 3.5 x 2.446 inches

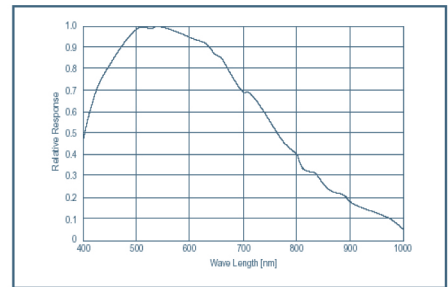
Camera Controls

Mass	300g
Power Requirement	External 5VDC - 3amp
Power Consumption	~2.5Watts uncooled / ~8.5 Watts cooled
Operating Temperature	0° C to +50° C
Operating Humidity	5%-95%, Non-condensing
Integration Time	3.5µs to 20 minutes
Auto Exposure	Automatic / Manual
White Balance	Automatic / Manual
Gain	Programmable / 1 to 10x
Interface Connector	USB 2.0 high-speed interface
Dimensions (L x W x H)	3.85 x 3.5 x 2.446 inches
Lens Mount	C-Mount lens adapter
Binning Options	2x2, 3x3, 4x4

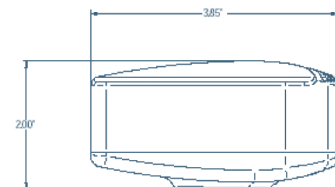
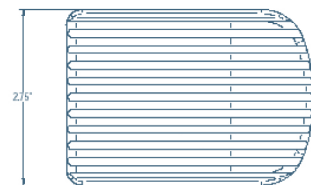
Design, features and specifications are subject to change without notice.



Color Response Curve



Mono Response Curve



Recommended PC Specs:

- Pentium 4, 1.3 GHz or higher
- 512MB RAM
- 60 MB hard drive free space or more
- USB 2.0 Port
- Windows 2000, XP, Vista, or 7

Minimum PC Specs:

- 600 MHz Processor
- 256 MB of SDRAM
- 20 MB hard drive free space
- USB 2.0 Port
- Windows 98 or ME with a USB 2.0
- Add-in card and driver

Product Includes:

- AU-140CL-CCD INFINITY digital camera for USB 2.0
- CD-ROM with INFINITY user application software
- TWAIN driver
- Documentation
- USB 2.0 cable



Mac Plug-In Available

- A Mac Plug-In for all ACCU-SCOPE/UNITRON cameras is now available
- Compatible with Mac OS 10.4 (requires Quick Time V7)
- Contact ACCU-SCOPE/UNITRON to download the latest version

ISO 9001 Certification

Design and production adheres to ISO9001 international quality standard.

ISO 14001 Certification

Design and production meets the requirements of international standard ISO 14001 for environmental management.



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