

DIGITAL MICROSCOPY CAMERAS

ACCU-SCOPE[®] and UNITRON[®] digital microscopy cameras are specifically engineered for low light, color critical and high-speed applications for clinical, life science, material science and education professionals.



ACCU-SCOPE
Quality thru Vision

UNITRON
EXCELLENCE BY DESIGN
SINCE 1952



CMOS Cameras

Highlights

- 2, 3 and 5 megapixel resolution
- Perfect for documentation and archiving applications
- Fast frame rates

The CMOS USB 2.0 cameras are designed to be a cost-effective, versatile solution for a variety of microscopy imaging applications. Features include auto white balance, full exposure control, programmable gain, sub-windowing and region of interest. An excellent fit for documentation and archiving applications.

Models

- AU-200-CMOS** 2.0 Megapixel CMOS Color Camera
- AU-310-CMOS** 3.1 Megapixel CMOS Color Camera
- AU-500-CMOS** 5.0 Megapixel CMOS Color Camera

Applications

Brightfield, Darkfield, DIC, Live Cell Imaging, Histology, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Metrology

CCD Cameras

Highlights

- 1, 2 and 3 megapixel resolution
- Higher dynamic range for quantitative analysis
- Fast frame rates
- Low noise electronics

Equipped with a high-quality, Sony CCD sensor, the CCD USB 2.0 cameras offer excellent sensitivity, high dynamic range and a 12-bit digital output. Features include binning, auto white balance, full exposure control, programmable gain, sub-windowing and region of interest. Ideal for higher-end scientific, medical, ophthalmic and life science applications.

Models

- AU-140RC-CCD** 1.4 Megapixel CCD Color Camera
- AU-140RM-CCD** 1.4 Megapixel CCD Monochrome Camera
- AU-200-CCD** 2.0 Megapixel CCD Color Camera
- AU-200M-CCD** 2.0 Megapixel CCD Monochrome Camera
- AU-330-CCD** 3.3 Megapixel CCD Color Camera
- AU-500-CCD** 5.0 Megapixel CCD Color Camera

Applications

Brightfield, Darkfield, DIC, Live Cell Imaging, Histology, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Metrology, Gel Documentation, Moderate Light Fluorescence

Infinity Camera Selection

High to Moderate Illumination

10-bit Quantitative Analysis

Brightfield/Darkfield
DIC
Live Cell Imaging
Histology/Pathology/Cytology
Semiconductor Inspection
Metrology
Documentation and Archiving

AU-200-CMOS 2.0 Megapixel CMOS Color
AU-310-CMOS 3.1 Megapixel CMOS Color
AU-500-CMOS 5.0 Megapixel CMOS Color

Moderate to Low Illumination

12-bit Quantitative Analysis

Brightfield/Darkfield
DIC
Live Cell Imaging
Histology/Pathology/Cytology
Semiconductor Inspection
Metrology
Documentation and Archiving

Moderate Light Fluorescence
Gel Documentation

AU-140RC-CCD 1.4 Megapixel CCD Color
AU-140RM-CCD 1.4 Megapixel CCD Monochrome
AU-200-CCD 2.0 Megapixel CCD Color
AU-200M-CCD 2.0 Megapixel CCD Monochrome
AU-330-CCD 3.3 Megapixel CCD Color
AU-107-CCD 10.7 Megapixel CCD Color

High Sensitivity

12-bit Quantitative Analysis

Brightfield/Darkfield
DIC
Live Cell Imaging
Histology/Pathology/Cytology
Semiconductor Inspection
Metrology
Documentation and Archiving
Gel Documentation

Low Light Fluorescence

Chemiluminescence
Bioluminescence
Flow Analysis
GFP
FISH
NIR
FRET

AU-140CL-CCD 1.4 Megapixel Cooled CCD Color
AU-140CM-CCD 1.4 Megapixel Cooled CCD Monochrome
AU-140-UC-CCD 1.4 Megapixel Uncooled CCD Color
AU-140-UM-CCD 1.4 Megapixel Uncooled CCD Monochrome



Cooled CCD Cameras

Highlights

- 1 megapixel resolution
- Cooling to 25°C below ambient
- High signal to noise ratio for low light, long exposure applications
- Fast frame rates
- Low noise electronics

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 high dynamic range, excellent sensitivity and a 12-bit digital output. Features include binning, auto white balance, full exposure control, programmable gain, sub-windowing and region of interest.

Models

- [AU-140CL-CCD](#) 1.4 Megapixel Cooled CCD Color Camera
- [AU-140CM-CCD](#) 1.4 Megapixel Cooled CCD Monochrome Camera
- [AU-140-UC-CCD](#) 1.4 Megapixel Uncooled CCD Color Camera
- [AU-140-UM-CCD](#) 1.4 Megapixel Uncooled CCD Monochrome Camera

Applications

Brightfield, Darkfield, DIC, Live Cell Imaging, Histology, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Metrology, Low Light Fluorescence, Chemiluminescence, Bioluminescence, Flow Analysis, GFP, FISH, NIR, FRET



Large Format CCD Cameras

Highlights

- 11 megapixel resolution
- Large format sensor
- Superior light sensitivity with high fidelity color reproduction
- Low noise electronics
- [F-mount lens adapter](#)

The large format camera series offers large format megapixel Kodak sensors for a wide field of view. The perfect choice for demanding high resolution imaging requiring excellent color rendition. Features include a 12-bit digital output, binning, progressive scan electronic shutter, full exposure control, auto white balance, programmable gain, sub-windowing and region of interest—ideal for high end ophthalmic, medical, clinical and life science applications.

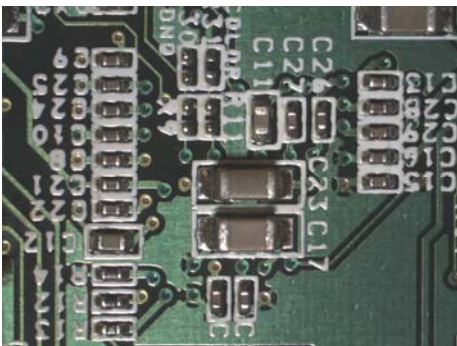
Models

- [AU-107-CCD](#) 10.7 Megapixel CCD Color Camera
- [AU-107M-CCD](#) 10.7 Megapixel CCD Monochrome Camera

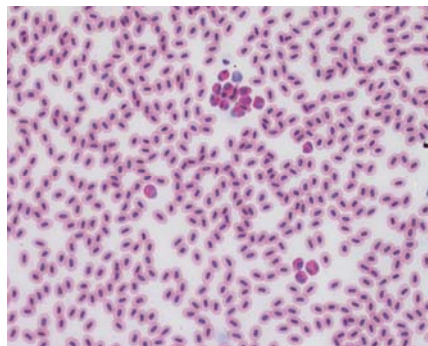
Applications

Brightfield, Darkfield, DIC, Live Cell Imaging, Histology, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Metrology, Gel Documentation, Moderate Light Fluorescence

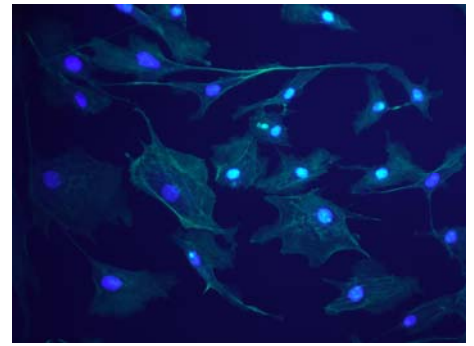
Screen Shot Samples



Materials Sample



Blood Sample



Flourescence Sample



High Resolution Pixel-shifting Camera

Highlights

- 2, 8, 16 and 32 megapixel resolution
- Ideal for archiving and documentation
- Fast frame rates

Sub pixel shifting technology provides variable resolution capture at 2, 8, 16 and 32 megapixel resolution with precise color and good sensitivity. The USB 2.0 camera is an extraordinary tool for clinical, life and material science professionals where megapixel resolution, color accuracy and light sensitivity are critical. Features include auto white balance, full exposure control, programmable gain, sub-windowing and region of interest.

Models

AU-X-32-CCD 32 Megapixel CCD Color Camera

Applications

High Resolution, Brightfield, Darkfield, DIC, Live Cell Imaging, Histology, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Metrology

INFINITY ANALYZE Software

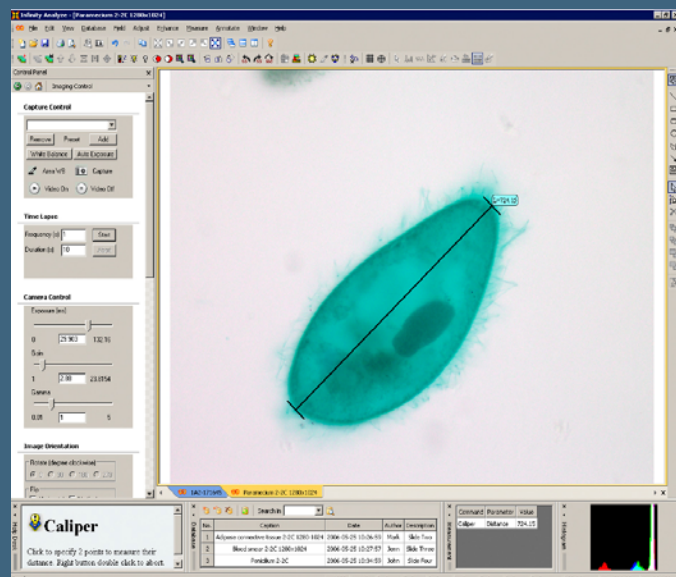
All ACCU-SCOPE digital microscopy cameras include INFINITY ANALYZE software, allowing complete camera control and advanced image acquisition and analysis.

Features include:

- Real time video preview
- Measurement and annotation
- Archiving with search for date, author, description
- Fluorescent image composition including RGB Look-Up Tables (LUT)
- Single capture and time lapse
- Image stitching
- Automatic/manual exposure and white balance
- Hue, saturation, gain, contrast, brightness and gamma controls
- Advanced image processing
- Customize interface for specific applications
- Thumbnail worksheet
- Drag and drop measurement data to excel for analysis
- Save and restore camera settings
- Context sensitive help for all functions
- Optional focus enhancement

Also included is INFINITY CAPTURE, an intuitive user interface that contains all of the basic features needed to control the camera and capture images.

Easily integrate your INFINITY camera with 3rd party software applications through our TWAIN and DirectX/WDM interface (included).



Camera Specifications

Product Code	Mega-pixel	Resolution	FPS	Sensor	Bit Depth	Binning/Sub Sampling	Power
AU-200-CMOS	2	1600 x 1200	20	1/2" CMOS	8 or 10	N/Y	USB or 5VDC
AU-310-CMOS	3.1	2048 x 1536	12	1/2" CMOS	8 or 10	N/Y	USB or 5VDC
AU-500-CMOS	5	2592 x 1944	7	1/2.5" CMOS	8 or 10	N/Y	USB or 5VDC
AU-140RC-CCD	1.4	1392 x 1040	15	1/2" CCD	8 or 12	Y/Y	USB or 5VDC
AU-140RM-CCD	1.4	1392 x 1040	15	1/2" CCD	8 or 12	Y/Y	USB or 5VDC
AU-200-CCD	2	1616 x 1216	12	1/1.8" CCD	8 or 12	Y/Y	USB or 5VDC
AU-200M-CCD	2	1616 x 1216	12	1/1.8" CCD	8 or 12	Y/Y	USB or 5VDC
AU-330-CCD	3.3	2080 x 1536	5	1/1.8" CCD	8 or 12	Y/Y	USB or 5VDC
AU-500-CCD	5	2448 x 2048	8	2/3" CCD	8 or 10	Y/Y	USB or 5VDC
AU-140CL-CCD	1.4	1392 x 1040	15	2/3" Cooled CCD	8 or 12	Y/Y	USB or 5VDC
AU-140CLM-CCD	1.4	1392 x 1040	15	2/3" Cooled CCD	8 or 12	Y/Y	USB or 5VDC
AU-140UC-CCD	1.4	1392 x 1040	15	2/3" CCD	8 or 12	Y/Y	USB or 5VDC
AU-140UM-CCD	1.4	1392 x 1040	15	2/3" CCD	8 or 12	Y/Y	USB or 5VDC
AU-107-CCD	10.7	4008 x 2672	3	35mm format CCD (43mm diagonal)	8 or 12	Y/Y	12VDC
AU-107M-CCD	10.7	4008 x 2672	3	35mm format CCD (43mm diagonal)	8 or 12	Y/Y	12VDC
AU-X-32C	32	6484 x 4864	14 (SXGA)	Pixel Shifting 1/1.8" CCD	8 or 10	Y/Y	5VDC

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

- Auto/Manual Exposure
- Auto/Manual White Balance
- Programmable Gain, 1 to 10X Optimizable
- **All Cameras use C-Mount Lens Adapter, except for AU-107 series uses F-Mount Lens Adapter**
- USB 2.0 High-Speed Interface (USB 480 MB/s vs. Firewire 400 MB/s)
- Operating Temperature 0°C to +50°C
- Operating Humidity 5% to 95%, Non-condensing

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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