MVIA
Scientific Imaging

HIGH PERFORMANCE DIGITAL IMAGING
made easy

MICROCAM 5.0 & 3.3 RTV

High Resolution IEEE 1394 FireWire™ Digital CCD Color Camera with High Speed Real-Time Viewing

The MVIA MicroCam with Real Time Viewing (RTV) delivers unsurpassed interactivity and productivity by combining ultra high resolution images with video-like, full field of view frame rates of up to 30fps. Scanning, framing and focusing have never been easier than with the MicroCam RTV. The 30-bit color digitization produces high quality images of brightfield, dark-field and fluorescence work. For demanding low-light applications, the MicroCam RTV Cooled minimizes thermal noise during long exposure times. With an IEEE 1394 FireWire™ digital interface the MicroCam RTV is easy to install, requiring a single wire to connect the camera to a computer or laptop. The MicroCam RTV eliminates expenses, installation problems and inconveniences associated with framegrabbers and external power supplies. All cameras ship with Image Capture software. Large selections of specialty software applications are available from MVIA software partners and a Software Development Kit (SDK) is available upon request for interfacing the MicroCam RTV with custom software.

Note: Microscope is shown for illustration only and is not included.

CAMERA MODELS

*Includes: **IEEE 1394 FireWire™ cable, IEEE 1394 PCI card, Capture software, Adobe Photoshop Elements, and access to SDK***

■ MicroCam 5.0 RTV Cooled
  Model: MC5.0-RTV-CLR-10-C
  CCD Digital Camera, Color, 30-bit with Peltier Cooling

■ MicroCam 5.0 RTV Non-cooled
  Model: MC5.0-RTV-CLR-10
  CCD Digital Camera, Color, 30-bit

■ MicroCam 3.3 RTV Cooled
  Model: MC3.3-RTV-CLR-10-C

■ MicroCam 3.3 RTV Non-cooled
  Model: MC3.3-RTV-CLR-10

FEATURES / BENEFITS

FEATURES	BENEFITS
High Resolution 5 or 3.3 Million pixel sensor	■ Highly detailed, sharp images suitable for publication
Real-Time Viewing	■ Previewing & focusing in real time ■ 30fps full field of view with MicroCam 3.3 RTV ■ 25fps full field of view with MicroCam 5.0 RTV
Flexible Exposure Control from 1.6ms to 17.9min	■ Optimal integration over a wide range of light levels
Peltier Cooling	■ Minimizes thermal noise during low light imaging
ROI (Region Of Interest)	■ Higher frame rates for previewing & focusing
Binning	■ Increased sensitivity for quantitation & imaging of very low light levels ■ Increased frame rate
IEEE 1394 FireWire	■ Simple connectivity ■ Ease of use & installation ■ Portability with laptop computer ■ Simultaneous use of multiple cameras through a single port ■ Single cable operation, no external power supply or control unit
Extensive third party software support	■ Choose from a large selection of life science & industrial software for microscopy, machine vision and video streaming applications.

MICROCAM 5.0 & 3.3 RTV SPECIFICATIONS

APPLICATIONS

High resolution still images for publication, documentation, and archiving in:

- Brightfield, Phase Contrast and Dark-field Microscopy
- Fluorescence Microscopy
- Pathology
- Histology
- Cytology
- Haematology
- Document Imaging
- Still Image Animation

CCD SENSOR

Light Sensitive Pixels	
MicroCam 5.0 RTV	5 million; 2560 x 1920
MicroCam 3.3 RTV	3.3 million; 2048 x 1536
Binning Modes	2x2, 3x3, 4x4 in full color
ROI (Region Of Interest)	From 1x1 pixels up to full resolution, continuously variable in single pixel increments
Exposure/Integration Control	1.6ms to 17.9min in 1μs increments
Sensor Type	
MicroCam 5.0 RTV	Sony ICX282 Progressive Scan Interline CCD, Color
MicroCam 3.3 RTV	Sony ICX252 Progressive Scan Interline CCD, Color
Pixel Size	
MicroCam 5.0 RTV	3.4μm x 3.4μm
MicroCam 3.3 RTV	3.45μm x 3.45μm
Cooling Available	Yes
Cooling Type	Peltier thermoelectric cooling to 10 degrees Celsius below ambient
Digital Output	10-bit
Readout Frequency	20, 10, 5, 2.5MHz
Frame Rate	
MicroCam 3.3 RTV	30fps full field of view, higher fps with ROI functions
MicroCam 5.0 RTV	25fps full field of view, higher fps with ROI functions

CAMERA

Computer Platform/Operating System	Microsoft Windows® & Mac® OS*
Digital Interface	IEEE 1394 FireWire™
Shutter Control	Electronic shutter, no moving parts
Trigger Types	Internal, Software
Optical Interface	
MicroCam 5.0 RTV	2/3", C-Mount optical format
MicroCam 3.3 RTV	1/2", C-Mount optical format
Threadmount	1/4"–20 Mount
Power Requirements	3.8 watts non-cooled; 6.7 watts cooled; 8-24V
Weight	710g
Warranty	2 years
Operating environment	0 to 35 degrees Celsius (32 to 95 F)
Humidity	Less than 80% at 35 degrees Celsius (95F)

Refer to MVIA website for detailed listing of supported operating systems.
Note: Specifications are nominal and subject to change.

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