MicroPublisher 5.0 & 3.3 RTV

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

The **QImaging MicroPublisher 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 up to 30fps. Scanning, framing, and focusing have never been easier than with the MicroPublisher RTV. The 30-bit color digitization produces high-quality images of brightfield, darkfield, and fluorescence work. For demanding low-light applications, the MicroPublisher RTV Cooled camera minimizes thermal noise during long exposure times.

With an IEEE 1394 FireWire™ digital interface, the MicroPublisher RTV is easy to install, requiring a single wire to connect the camera to a computer or laptop. The MicroPublisher RTV eliminates expenses, installation problems, and inconveniences associated with framegrabbers and external power supplies.

All cameras ship with image-capture software. A large selection of specialty software applications is available from QImaging's software partners. A Software Development Kit (SDK) is available upon request for interfacing the MicroPublisher RTV with custom software.

High-Resolution, High-Speed Real-Time Viewing

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

features	benefits
High-Resolution, 5- or 3.3-Million-Pixel Sensor	■ Highly detailed, sharp images suitable for publication
Real-Time Viewing (RTV)	■ Previewing & focusing in real time ■ 30fps (full field of view) with MicroPublisher 3.3 RTV ■ 25fps (full field of view) with MicroPublisher 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	■ Increases sensitivity for quantitation & imaging of very low light levels ■ Increases 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, & video-streaming applications

applications

High-resolution still images for publication, documentation, and archiving in:	■ Brightfield, Phase-Contrast, & Darkfield Microscopy
	■ Fluorescence Microscopy
	■ Pathology, Histology, Cytology
	■ Hematology
	■ Document Imaging
	■ Still-Image Animation

MicroPublisher 5.0 & 3.3 Specifications

ccd sensor

Light-Sensitive Pixels
  MicroPublisher 5.0 RTV
  MicroPublisher 3.3 RTV
	5 million real pixels; 2560 x 1920
	3.3 million real pixels; 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
  MicroPublisher 5.0 RTV
  MicroPublisher 3.3 RTV
	Sony® ICX282 progressive-scan interline CCD (color)
	Sony® ICX252 progressive-scan interline CCD (color)

Pixel Size
  MicroPublisher 5.0 RTV
  MicroPublisher 3.3 RTV
	3.4μm x 3.4μm
	3.45μm x 3.45μm

Cooling Available	Yes (optional)
Cooling Type	Peltier thermoelectric cooling to 10°C below ambient
Digital Output	10 bits
Readout Frequency	20, 10, 5, 2.5MHz

Frame Rate
  MicroPublisher 3.3 RTV
  MicroPublisher 5.0 RTV
	30fps full field of view (higher fps with ROI functions)
	25fps full field of view (higher fps with ROI functions)

camera

Computer Platforms/ Operating Systems	Windows® 7, Vista and XP (32/64 bit)
Digital Interface	IEEE 1394 FireWire™
Shutter Control	Electronic shutter, no moving parts
Trigger Types	Internal, Software

Optical Interface
  MicroPublisher 5.0 RTV
  MicroPublisher 3.3 RTV
	2/3", C-mount optical format
	1/2", C-mount optical format

Threadmount	1/4" — 20 mount
Power Requirements	3.8W (non-cooled); 6.7W (cooled); 8-24V
Weight	710g
Warranty	2 years
Operating Environment	0 to 35°C (32 to 95°F)
Humidity	Less than 80% non-condensing at 35°C (95°F)

camera models

Includes: IEEE 1394 FireWire™ cable, IEEE 1394 PCIe card, QCapture software, QCapture Pro software and access to SDK

- **MicroPublisher 5.0 RTV Cooled**
  Model: MP5.0-RTV-CLR-10-C
  CCD Digital Camera, Color, 30 Bits with Peltier Cooling
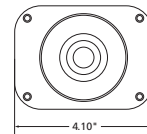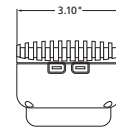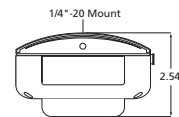
- **MicroPublisher 5.0 RTV Non-Cooled**
  Model: MP5.0-RTV-CLR-10
  CCD Digital Camera, Color, 30 Bits

- **MicroPublisher 3.3 RTV Cooled**
  Model: MP3.3-RTV-CLR-10-C

- **MicroPublisher 3.3 RTV Non-Cooled**
  Model: MP3.3-RTV-CLR-10

1/4"-20 Mount
2.54"

3.10"

4.10"

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RoHS

QI_MP_DS_Rev_A7