

# 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	<ul style="list-style-type: none"> <li>Highly detailed, sharp images suitable for publication</li> </ul>
Real-Time Viewing (RTV)	<ul style="list-style-type: none"> <li>Previewing &amp; focusing in real time</li> <li>30fps (full field of view) with MicroPublisher 3.3 RTV</li> <li>25fps (full field of view) with MicroPublisher 5.0 RTV</li> </ul>
Flexible Exposure Control from 1.6ms to 17.9min	<ul style="list-style-type: none"> <li>Optimal integration over a wide range of light levels</li> </ul>
Peltier Cooling	<ul style="list-style-type: none"> <li>Minimizes thermal noise during low-light imaging</li> </ul>
ROI (Region of Interest)	<ul style="list-style-type: none"> <li>Higher frame rates for previewing &amp; focusing</li> </ul>
Binning	<ul style="list-style-type: none"> <li>Increases sensitivity for quantitation &amp; imaging of very low light levels</li> <li>Increases frame rate</li> </ul>
IEEE 1394 FireWire™	<ul style="list-style-type: none"> <li>Simple connectivity</li> <li>Ease of use &amp; installation</li> <li>Portability with laptop computer</li> <li>Simultaneous use of multiple cameras through a single port</li> <li>Single-cable operation (no external power supply or control unit)</li> </ul>
Extensive Third-Party Software Support	<ul style="list-style-type: none"> <li>Choose from a large selection of life science &amp; industrial software for microscopy, machine vision, &amp; video-streaming applications</li> </ul>

### 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

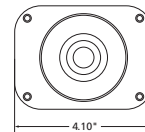
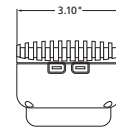
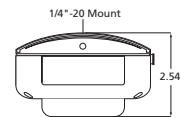
Model: MP5.0-RTV-CLR-10  
CCD Digital Camera, Color, 30 Bits

### ■ MicroPublisher 3.3 RTV Cooled

Model: MP3.3-RTV-CLR-10-C

### ■ MicroPublisher 3.3 RTV Non-Cooled

Model: MP3.3-RTV-CLR-10



Tel 604.530.5800 ■ Fax 604.539.1825 ■ info@qimaging.com  
www.qimaging.com



\*Refer to QImaging website for detailed listing of supported operating systems.  
Note: Specifications are typical and subject to change.

MicroPublisher is a trademark of QImaging Corporation.  
QImaging is a registered trademark of QImaging Corporation.  
Other brand and product names are the trademarks or registered trademarks of their respective owners and manufacturers.