

# QIClick™

## Scientific Digital CCD Camera – Monochrome or Color

The QImaging QIClick™ digital CCD camera features enhanced visible and IR quantum efficiency resulting in high sensitivity that is ideal for demanding imaging applications.

A progressive-scan interline CCD sensor gives a resolution of 1.4 million pixels in a 12-bit digital output. High-speed, low-noise electronics provide linear digital data for rapid image capture. The IEEE 1394 FireWire™ digital interface allows ease of use and installation with a single wire.

No framegrabber or external power supply is required. The QIClick includes QCapture software (Windows® and Mac OS) for real-time image preview and capture. A Software Development Kit (SDK) is available for interfacing with custom software.

### applications

- Brightfield, Phase-Contrast, & Darkfield Microscopy
- Pathology, Histology, & Cytology
- Fluorescence Microscopy
- Green Fluorescent Protein (GFP) Applications
- FISH
- Ca++ Ratio Analysis
- Motility & Motion Analysis
- DNA Analysis
- Metallurgical Microscopy
- Semiconductor Inspection
- Manufacturing Quality Control
- Failure Analysis
- Forensic Analysis



*Note: Lens is shown for illustration only and is not included.*

features	benefits
High Quantum Efficiency	<ul style="list-style-type: none"> <li>■ Sensitivity for demanding imaging applications</li> </ul>
High-Resolution, 1.4-Million-Pixel Sensor	<ul style="list-style-type: none"> <li>■ Highly detailed, sharp images</li> </ul>
High-Speed Readout	<ul style="list-style-type: none"> <li>■ Previewing &amp; focusing in real time</li> <li>■ 110fps with 8x8 binning &amp; ROI</li> <li>■ 10fps full resolution @ 12 bits</li> <li>■ Ideal for automated imaging applications</li> </ul>
Low-Noise Electronics	<ul style="list-style-type: none"> <li>■ Quantitation &amp; imaging of low light levels</li> </ul>
Optional/Removable IR-Cutoff Filter	<ul style="list-style-type: none"> <li>■ Highly focused visible-range images with IR filter in place</li> <li>■ Removable for IR applications</li> </ul>
Flexible Exposure Control from 10µs to 17.9min	<ul style="list-style-type: none"> <li>■ Optimal integration over a wide range of light levels</li> </ul>
External Sync & Trigger	<ul style="list-style-type: none"> <li>■ Tight synchronization with flashlamps, automated filters, shutters, &amp; microscope stages</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™ QImaging Fast 1394 Technology	<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 Application 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 functions</li> </ul>

# QIClick Specifications

ccd sensor	
Light-Sensitive Pixels	1.4 million; 1392 x 1040
Binning Modes	2x2, 4x4, 8x8
ROI (Region of Interest)	From 1x1 pixels up to full resolution, continuously variable in single-pixel increments
Exposure/Integration Control	10µs to 17.9min in 1µs increments
Sensor Type	Sony® ICX285 progressive-scan interline CCD (monochrome or color)
Pixel Size	6.45µm x 6.45µm
Linear Full Well	18,000e- (22,000e- with 2x2 binning)
Read Noise	8e-
Dark Current	1.5 e/p/s
Digital Output	12 bits
Readout Frequency	20, 10, 5, 2.5MHz
Frame Rate	10fps full resolution @ 12 bits (165fps maximum with binning and ROI functions)
camera	
Computer Platforms/ Operating Systems	Windows® & Mac OS*
Digital Interface	IEEE 1394 FireWire™
Sustained Image Data Rate	40MB/s
External Trigger	TTL Input (optically coupled)
Trigger Types	Internal, Software, External
External Sync	TTL Output (optically coupled)
Gain Control	0.7 to 30x
Offset Control	-2048 to 2047
Optical Interface	2/3", C-mount optical format
Threadmount	1/4" – 20 mount
Power Requirements	7W
Weight	640g
Warranty	2 years
Operating Environment	0 to 50°C (32 to 122°F)
Storage Temperature	-10 to 60°C
Humidity	Less than 80% non-condensing at 35°C (95°F)

## included

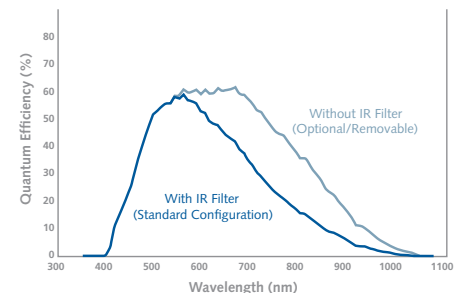
- **QIClick Digital CCD Camera**  
Model: QIClick-F-M-12 (monochrome, 12-bit)  
Model: QIClick-F-CLR-12 (CCD color, Bayer Mosaic, 12-bit)
- IEEE1394 FireWire cable
- IEEE1394 FireWire PCI card
- QCapture software
- Access to SDK

## camera options

- Removable IR-Cutoff Filter
- **RGB Color Filter** for monochrome cameras (F-mount interface required), refer to spec sheet for more details
- Performance Assurance Program (extended warranty)



## spectral response



RoHS



\*Refer to QImaging website for detailed listing of supported operating systems.

Note: Specifications are typical and subject to change.

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