

# Kingfisher CCD 2.8MP / 6MP

Fluorescence CCD Camera

4.54 $\mu$ m x 4.54 $\mu$ m • Dynamic Range of 65dB • Readout Noise <7e •



## Key Features and Benefits

*Perfect for staring applications!*

- **Extremely low dark current**  
Allows long exposure times
- **2.8MP or 6MP sensor**  
Enables large field of view imaging
- **4.54 $\mu$ m x 4.54 $\mu$ m pixels**  
Ultra sharp image resolution, finer details with lower magnification
- **High QE: >77% @ 525nm and >50% @ 380nm & 720nm**  
Optimum Photon collection
- **Monochrome or RGB sensors available**  
Digital black/white or color images

Resolution	<b>1940 x 1460 2750 x 2200</b>
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Dark Current	<b>0.08 e/p/s</b>
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Dynamic Range	<b>65dB</b>
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Readout Noise	<b>&lt;7e</b>
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## Specification for Kingfisher CCD 2.8MP / 6MP

Sensor	SONY ICX674 Interline scientific CCD	SONY ICX694 Interline scientific CCD
Sensor Type	2/3" Scientific CCD	1" Scientific CCD
Active Pixel	1940 x 1460	2750 x 2200
Pixel Size	4.54µm x 4.54µm	
Active Area	8.81mm (H) x 6.63mm (V)	12.49mm (H) x 9.99mm (V)
Full Well Capacity	12000 electrons	
Non-Linearity	< 1%	
Readout Noise	< 7 electrons (Global Shutter)	
Frame Rate	6.2Hz full frame up to 45Hz with binning	3.1Hz full frame up to 23Hz with binning
Peak Quantum Efficiency (QE)	77% @ 525nm 50% @ 380nm & 720nm	
Spectral Response	310 - 1100nm	
Chroma	Monochrome and RGB sensors available	
Dark Current @ +25°C	< 0.08 electrons/pixel/sec	
Shutter mode	Global Shutter (Snapshot)	
Cooling	Active	
Cooling Method	TEC with forced air (fan)	
Lens Mount	C mount	
Synchronisation	Trigger IN and OUT - TTL compatible	
Power Supply	12V DC ±10%	
Total Power Consumption	<12W with TEC ON	
Operating case temperature <sup>1</sup>	-20°C to +55°C	
Storage Temperature Range	-40°C to +85°C	
Dimensions	94.9mm x 68.0mm x 62.7mm	
Weight (excluding lens)	< 480g	

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## Ordering Information

### Camera

Kingfisher Scientific CCD 2.8MP cooled digital B/W camera	KF674-CL
Kingfisher Scientific CCD 2.8MP cooled digital RGB camera	KF674-CL-RGB
Kingfisher Scientific CCD 6MP cooled digital B/W camera	KF694-CL
Kingfisher Scientific CCD 6MP cooled digital RGB camera	KF694-CL-RGB
Kingfisher Power Supply cable	RPL-HR4-K

### Optional Accessories

EPIX(R) EB1 base CL card	RPL-EPIX-EB1
EPIX(R) base notebook CL card	RPL-EPIX-ECB1-54
EPIX(R) XCAP STD software	RPL-XCAP-STD
CameraLink Cable, 2m <sup>2</sup>	RPL-CL-CBL-2M
Optical lenses <sup>3</sup>	RPL-xx-xxxx

Note 1: Extended operating temperature range on request

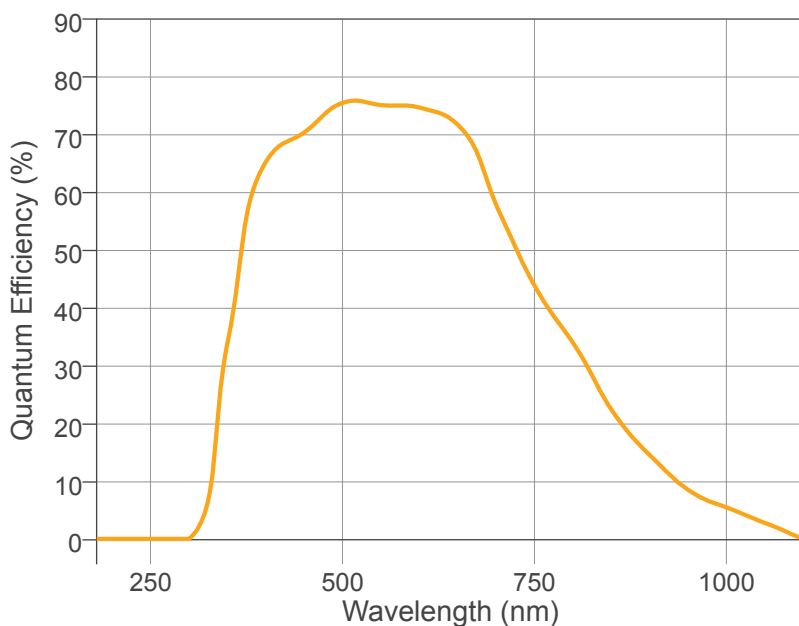
Note 2: Longer CL cable available

Note 3: Please consult us to check our range of lenses

Demo is available on request.  
Pricing AOR subject to volumes.

Detailed technical drawings  
can be downloaded at  
[www.raptorphotronics.com](http://www.raptorphotronics.com)

## Quantum Efficiency



## Applications

- Fluorescence imaging / spectroscopy
- Imaging cytometry
- High content screening
- High resolution fluorescence imaging
- Hyperspectral imaging
- Fixed Cell Imaging
- Astronomy

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