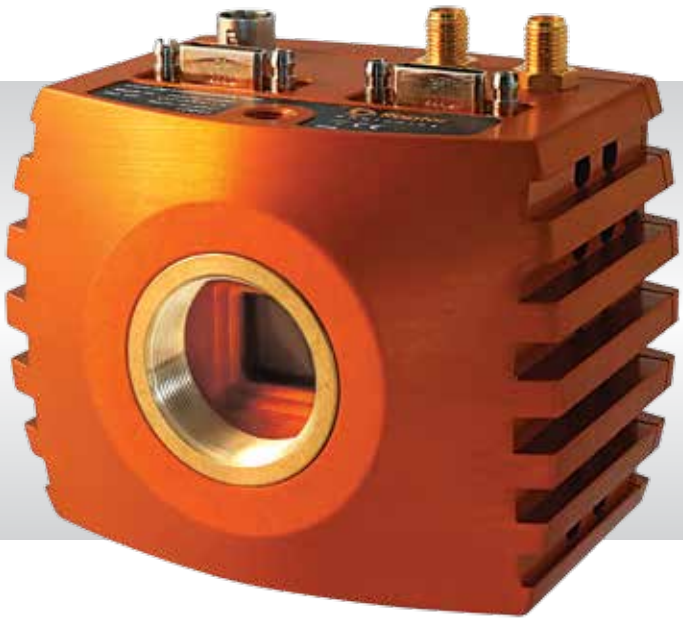
Osprey sCMOS RGB

Digital Colour 4.2MP Scientific CMOS
2048 x 2048 • RGB colour imaging • Ultra compact and rugged •



Key Features and Benefits

High Frame Rate for shorter exposures!

- **4.2MP Scientific CMOS sensor**
  Enables large field of view imaging
- **5.5µm x 5.5µm**
  Enables ultra sharp image resolution
- **Ultra compact and rugged**
  Ideal for OEM integration into Life Science Instruments
- **On-board Non-Uniformity Correction (NUC)**
  Enables highest quality images
- **TE cooling**
  Optimises dark current

Resolution	**2048 x 2048**
Frame Rate	**37.5Hz**
Cameralink	**12 bit**
Readout Noise	**7e**

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www.raptorphotonics.com

Specification for Osprey sCMOS RGB

Sensor	CMOSIS Scientific CMOS (RGB)
Sensor Type	1" Scientific CMOS
Active Pixel	2048 x 2048
Pixel Size	5.5µm x 5.5µm
Active Area	11.26mm (H) x 11.26mm (V)
Full Well Capacity	12,000 electrons
Non-Linearity	< 1%
Readout Noise	< 9 electrons (Global Shutter)
Dynamic Range	65 dB (single shot)
Exposure time	27.7µs to 30min
Frame Rate	37.5Hz, higher through Binning & ROI
Dark Current	<9 eles/pix/sec @ +5°C
Digital Output Format	12 bit CameraLink, Base configuration 2-tap Raw Bayer output for host based interpolation
Peak Quantum Efficiency	>63% @ 500nm >34% @ 850nm
Spectral Response	350 - 1100nm
Shutter mode	Global Shutter (Snapshot)
Cooling	+5°C with ambient air @ +20°C
Cooling Method	TEC with forced air (fan)
Lens Mount	C mount
Synchronisation[1]	Trigger IN and OUT - TTL compatible
Power Supply	12V DC ±10%
Total Power Consumption	< 2.5W without TEC <7.5W with TEC ON
Operating Case Temperature[2]	-20°C to +55°C
Storage Temperature Range	-40°C to +85°C
Dimensions	85.9mm x 65mm x 61.5mm
Weight (excluding lens)	< 432g

Ordering Information

Camera

OSPREY Scientific CMOS 4.2MP cooled digital Colour camera	OS4MPc-CL-RGB
Power Supply Unit	RPL-HR4-K

Optional Accessories

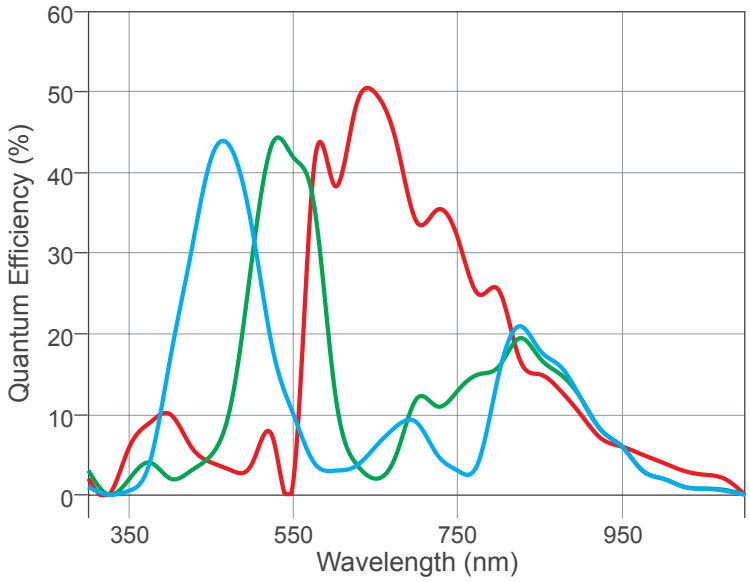
EPIX(R) E8 Full CL card	RPL-EPIX-E8
EPIX(R) base Notebook CL card	RPL-EPIX-ECB1-34
EPIX(R) base Notebook CL card	RPL-EPIX-ECB1-54
EPIX(R) XCAP STD software	RPL-XCAP-STD
CameraLink Cable, 2m[3]	RPL-CL-CBL-2M
Optical Visible lenses[4]	RPL-xx-xxxx

Note 1: Flexible triggering options
Note 2: Extended Operating Temperature range on request
Note 3: Longer CL cable available
Note 4: 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.raptorphotonics.com

Quantum Efficiency



Applications

- Adaptive Optics and Astronomy
- Bio & Chemi-luminescence
- Brightfield Microscopy
- Darkfield Microscopy
- Fluorescence imaging / spectroscopy
- Flow cytometry
- FRET / FRAP / TIRF
- Gel Documentation
- Genome sequencing
- High content screening
- High resolution fluorescence imaging
- Hyperspectral imaging
- Live Cell Imaging
- Pathology

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