

Hawk 4096

12.3MP Resolution, Ultra Sensitive, Monochrome & Colour Options,
Digital CMOS Camera • 4096 x 3008 • 10Hz • Digital • Global Shutter • C Mount

The Hawk 4096 camera is based on Sony's next generation Pregius sensor. It combines high sensitivity, and QE up to 75%. It is ruggedised to withstand the harshest operating environments in airborne, space, surveillance, industrial and marine applications.

OEM only – minimum orders apply



Key Features and Benefits

Ruggedised CMOS camera 12.3MP Night Vision Cameraa

- **4096 x 3008, 2.74µm pitch CMOS technology**
Enables highest resolution imaging from 0.3µm to 1.1µm
- **Latest Generation CMOS technology**
Enables ultimate sensitivity similar to II or EMCCD in mono and colour options
- **Ultra compact and rugged**
Easy integration into any Electro-Optics platform
- **Global shutter, progressive scan technology**
Enables real time, lag-free images at 10Hz full-frame

Resolution	4096 x 3008
Frame Rate	10Hz
Dynamic Range	72dB
Peak QE	86% @ 520nm

PRELIMINARY

Specification for Hawk 4096

	Monochrome	Color
Sensor Type	1½" CMOS	
Active Pixel	4096 x 3008	
Frame Rate	10Hz	5Hz
Pixel Size	2.74µm x 2.74µm	
Active Area (Diagonal)	(14mm)	
Dynamic Range	72dB	
Anti-blooming	Yes	
Spectral Response	300-1100nm	
Peak Quantum Efficiency	86% @ 520nm, 28% @ 800nm	On request
Non-Linearity	<1%	
Total Power Consumption	<4W	
Minimum Illumination	< 200µlux	
Output Format	12 bit Camera Link (2 tap) (base configuration)	24 bit RGB (base)
Synchronization	Trigger In & OUT - TTL compatible	
Trigger Connectors	SMA type	
Cooling	Uncooled	
Lens Mount	C mount, back focus capability	
Power Connector	Hirose part code HR10A-7R-4PB	
Power Supply	12V DC ±10%	
Operating Temperature Range ¹	-20°C to +55°C	
Storage Temperature Range	-40°C to +70°C	
Dimensions (L*W*H) ²	43mm x 43mm x 37mm	
Weight (excluding lens)	95g	

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

Ordering Information

Camera

Hawk 4096 Digital camera	HK4096-CL
Hawk 4096 Digital PSU	RPL-HR4-K
Hawk 4096 Color Digital Camera	HK4096-CL-C

Optional Accessories

Mini PC with XCAP Std and frame grabber	RPL-PC-mf2280
Thunderbolt frame grabber	RPL-mf2280
EPIX® EB1 frame grabber	RPL-EPIX-EB1
EPIX® XCAP software	RPL-XCAP-STD
Camera Link Cable (2m) ³	RPL-CL-CBL-2M

Lenses

Optical Visible & CCTV day/night lenses ⁴	RPL-xx-xxxx
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Note 1: Extended operating temperature range on request.

Note 2: Dimensions include all connector parts on the camera interface.

Note 3: Longer Camera Link cable available.

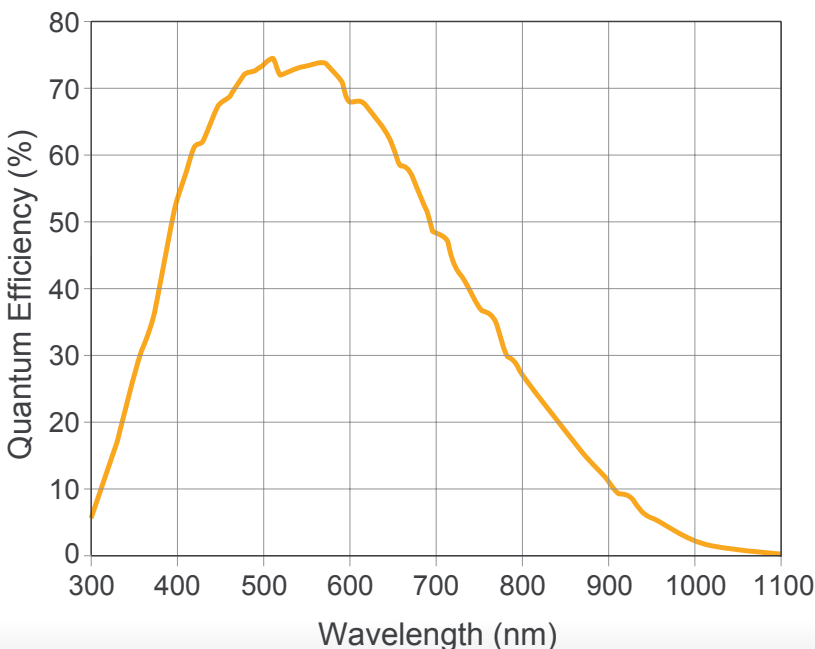
Note 4: Please consult us to check our range of lenses.

Custom Options

- No CS-Mount
- Board level
- Extended operational temperature -40°C to +75°C
- Flexi-rigid electronics to fit specific EO systems
- Customized mechanics
- Digital video output eg HD-SDI

Detailed technical drawings
can be downloaded at
www.raptorphotonics.com

Quantum Efficiency



Applications

Space

- Docking
- Navigation
- Space Situational Awareness
- Inspection
- Hyperspectral Imaging
- Earth Observation

*Data supplied by sensor manufacturer



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