

Hawk 800

SVGA Resolution, Ultra Sensitive, Monochrome, Digital CMOS Camera
816 x 624 • 60Hz • Digital • Global Shutter • C Mount

The Hawk 800 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



PRELIMINARY



Key Features and Benefits

Ruggedised CMOS camera SVGA 1/1.7" Night Vision Camera

- **816 x 624, 9µm pitch CMOS technology:**
Enables SVGA 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
- **High QE: >77% @ 510nm**
Enables better quality image under low light conditions
- **Global shutter, progressive scan technology**
Enables real time, lag-free images at 60Hz full-frame

Resolution	816 x 624
Frame Rate	60Hz
Dynamic Range	72dB
Peak QE	77% @ 510nm

Specification for Hawk 800

Sensor Type	1/1.7" CMOS
Active Pixel	816 x 624
Frame Rate	60Hz
Pixel Size	9.0µm x 9.0µm
Active Area (Diagonal)	7.34mm x 5.62mm (9.24mm)
Dynamic Range	72dB
Anti-blooming	Yes
Spectral Response	300-1100nm
Peak Quantum Efficiency	77% @ 510nm 28% @ 800nm
Non-Linearity	<1%
Total Power Consumption	<4W
Readout Noise	1.5e-
Output Format	12 bit Camera Link (base configuration)
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 800 Digital camera	HK800-CL
Hawk 800 Digital PSU	RPL-HR4-K

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
Mini CL to CameraLink cable, 2m (MDR-SDR) ³	RPL-MCL-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.

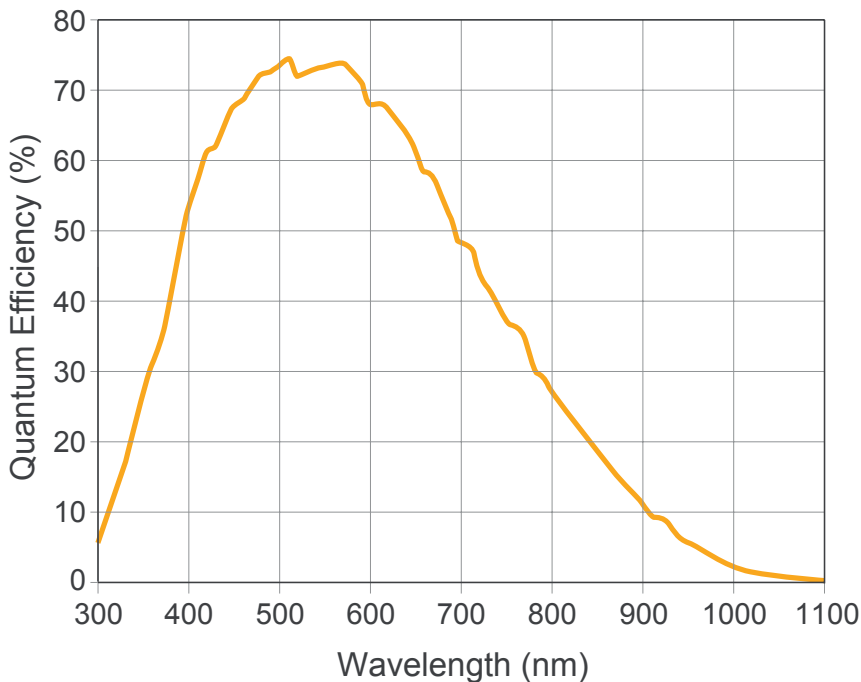
Note 4: Please consult us to check our range of lenses.

Custom Options

- No C-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



*Data supplied by sensor manufacturer

Applications

Surveillance

- Low-light Surveillance
- Airborne Surveillance
- Driver Vision Enhancement (DVE)
- Digital Night Vision