

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 |
|--|-------------|

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.

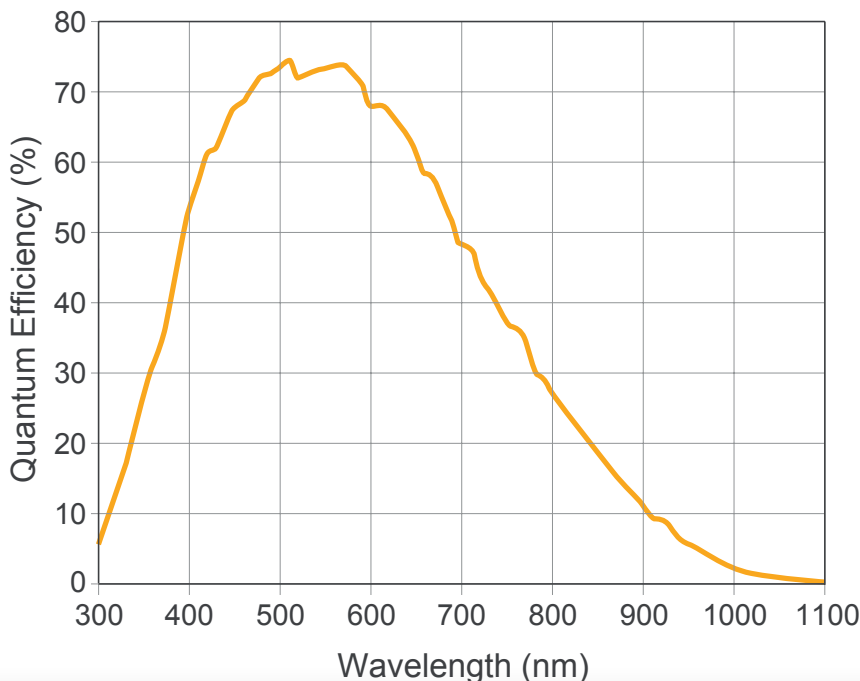
Note 4: Please consult us to check our range of lenses.

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



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