

# Hawk 1920

Ultra Sensitive, Monochrome & Colour Options,  
Digital CMOS Camera • 1944 x 1472 • Up to 50Hz • Digital • Global Shutter • C Mount

The Hawk 1920 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*

- **1944 x 1472, 4.5µm 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 images at 50Hz full-frame

Resolution	<b>1944 x 1472</b>
Frame Rate	<b>50Hz</b>
Dynamic Range	<b>72dB</b>
Peak QE <sup>1</sup>	<b>77% @ 510nm</b>

## Specification for Hawk 1920

	Monochrome	Color
Sensor Type	2/3" CMOS	
Active Pixel	1944 x 1472	
Frame Rate	50Hz (Max)	25Hz
Pixel Size	4.5µm x 4.5µm	
Active Area (Diagonal)	11.00mm	
Dynamic Range	72dB	
Anti-blooming	Yes	
Spectral Response	300-1100nm	
Non-Linearity	<1%	
Total Power Consumption	<5W	
Readout Noise	1.5e-	
Output Format	12 bit Camera Link (base configuration)	8 bit Camera Link
Synchronization	Trigger In & OUT - TTL compatible	
Trigger Connectors	SMA type	
Lens Mount	C mount, back focus capability	
Power Connector	Hirose part code HR10A-7R-4PB	
Power Supply	12V DC ±10%	
Operating Temperature Range <sup>2</sup>	-20°C to +55°C	
Storage Temperature Range	-40°C to +70°C	
Dimensions (L*W*H) <sup>3</sup>	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 1920 Digital camera	HK1920-CL
Hawk 1920 Digital PSU	RPL-HR4-K
Hawk 1920 Color Digital Camera	HK1920-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) <sup>4</sup>	RPL-CL-CBL-2M

### Lenses

Optical Visible & CCTV day/night lenses <sup>5</sup>	RPL-xx-xxxx
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Note 1: Peak QE quoted is for mono model only.

Note 2: Extended operating temperature range on request.

Note 3: Dimensions include all connector parts on the camera interface.

Note 4: Longer Camera Link cable available.

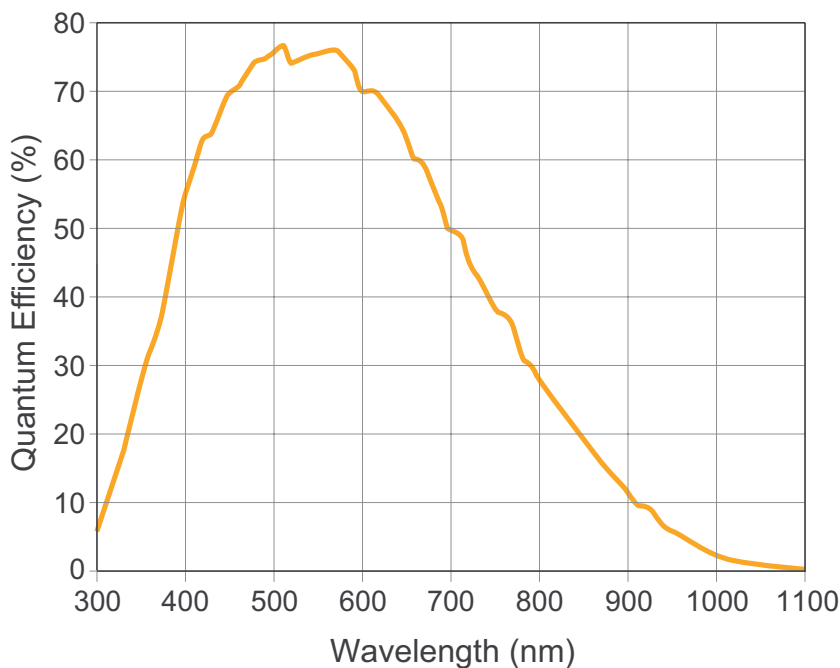
Note 5: Please consult us to check our range of lenses.

## 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 such as HD-SDI is available with our colour camera.

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