Raptor photonics

# HAWK 4096

## 4096 x 3008,Monochrome CMOS Camera



## Key Features and Benefits

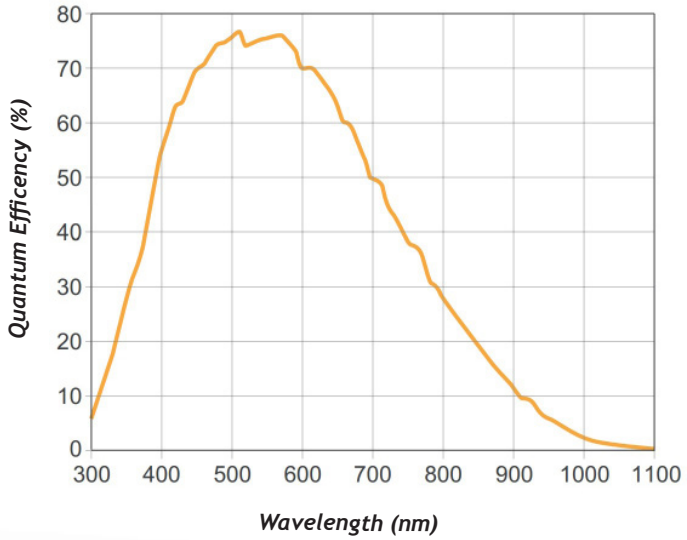
- **4096 x 3008 , 2.74µm pitch CMOS sensor**
  High resolution imaging from 0.3µm to 1.1µm
- **Monochrome CMOS sensor**
  Market leading Day & Night Video
- **On-board Automatic Light Control (ALC)**
  Real time, optimal video in all light conditions
- **Designed for harsh environments**
  High Shock, Vibration and extreme Temperature resistance
- **Global Shutter**
  10Hz full frame video, with no distortion (ideal for triggering)
- **Low Noise Electronics**
  No artifical noise added, optimising low light capability

| | |
|---|---|
| **Resolution** | 4096 x 3008 |
| **Frame Rate** | 10Hz |
| **Dynamic Range** | 72dB |
| **Peak QE** | 77% @ 510nm |

## Specification for Hawk 4096

| | |
|---|---|
| **Sensor** | 1/1.1" CMOS |
| **Active Pixel** | 4096 x 3008 |
| **Frame Rate** | 10Hz |
| **Pixel Size** | 2.74µm x 2.74µm |
| **Active Area (Diagnoal)** | 11.22mm x 8.24mm (14mm) |
| **Dynamic Range** | 72dB |
| **Anti-blooming** | Yes |
| **Spectral Response** | 300-1100nm |
| **Non-Linearity** | <1% |
| **Total Power Consumption** | <4W |
| **Minimum Illumination** | < 200µlux |
| **Output Format** | 12 bit Camera Link (2 tap)(base configuration) |
| **Cooling** | Uncooled |
| **Synchronization** | Trigger In & OUT - TTL compatible |
| Trigger Connectors | SMA type |
| **Lens Mount** | CS mount, back focus capability |
| **Power Connector** | Hirose part code HR10A-7R-4PB |
| **Power Supply** | 12V DC ±10% |
| **Operating Temperature[1]** | -20˚C to +55˚C |
| **Storage Temperature** | 40˚C to +70˚C |
| **Dimensons (excluding standard mounting)[2]** | 48mm x 44mm x 53mm (incl connectors) |
| **Weight** | 132g |

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*Data Supplied by Sensor Manufacturer*

## Specification for Hawk 4096

### Camera

| | |
|---|---|
| Hawk 4096 Digital Camera | HK4096-CL |
| Hawk 4096 Digital PSU | RPL-HR4-K |

### Optional Accessories

| | |
|---|---|
| Mini PC with XCAP STD and Frame Grabber | RPL-PC-mf2280 |
| Thunderbolt Frame | RPL-mf2280 |
| EPIX® EB1 Frame Grabber | RPL-EPIX-EB1 |
| EPIX® XCAP STD Software | RPL-XCAP-STD |
| MDR-SDR CameraLink Cable (2m)[3] | RPL-MCL-CBL-2M |

### Lenses

| | |
|---|---|
| Optical Visisble & CCTV day/night lenses[4] | RPL-xx-xxxx |

Note* CS adaptor required for C- Mount lenses

### Custom Options

- No CS Mount
- Board Level
- Extended operational temp -40˚C to +75˚C
- Flexi-rigid electronics to fit specfic EO Systems
- Customized mechanics

### Applications

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

For detailed tehnical drawings, volume pricing or to set up a demo, contact us at sales@raptorphotonics.com

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