

# Hawk 252

High Resolution, Ultra Sensitive Digital EMCCD Camera  
1280 x 1024 • 25/30Hz • Digital •



## Key Features and Benefits

*Cooled HD EMCCD Camera*

- **Back Illuminated EMCCD technology**  
Enables ultimate sensitivity imaging (<math><50\mu\text{lux}</math>)
- **High QE: >95% @ 600nm**  
GEN III image intensifier performance
- **Enhanced blue response from 180nm**  
Low light UV with visible detection

Resolution	<b>1280 x 1080</b>
Frame Rate	<b>25/30Hz</b>
Dynamic Range	<b>55dB</b>
Peak QE	<b>95% @ 600nm</b>

PRELIMINARY

## Specification for Hawk 252

Sensor Type	1" Back Thinned Frame Transfer EMCCD
Active Pixel	1280 x 1024
Frame Rate	25Hz / 30Hz
Pixel Size	8µm x 8µm
Active Area	10.24 mm x 8.192 mm
Dynamic Range	55dB
Anti-blooming	Standard
Spectral Response	300-1100nm
Peak Quantum Efficiency	95% @ 600nm
Non-Linearity	<1%
Readout Noise	EM Gain ON: <0.01e- EM Gain OFF: <60e-
Total Power Consumption	<20W (TEC ON, FAN ON)
Minimum Illumination	< 50µlux
Output Format	12 bit Camera Link (base configuration)
Synchronization	Trigger In & OUT - TTL compatible
Trigger Connector	SMA type
Cooling	Active, with fan
Lens Mount	C/mount, back focus capability
Power Connector	Hirose part code HR10A-7R-4PB
Power Supply	12V DC ±10%
Operating Temperature Range <sup>1</sup>	-20°C to +55°C
Storage Temperature Range	-40°C to +70°C
Dimensions (L*W*H) <sup>2</sup>	73.13mm x 62.00mm x 62.00mm
Weight (excluding lens)	350g

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## Ordering Information

### Camera

Hawk EM252 Digital camera	HK252-CL
Hawk EM252 Digital PSU	RPL-HR4-K

### Optional Accessories

Mini PC with XCAP Std and frame grabber	RPL-PC-EL1
EPIX® EB1 frame grabber	RPL-EPIX-EB1
EPIX® XCAP software	RPL-XCAP-STD
Camera Link Cable (2m) <sup>3</sup>	RPL-CL-CBL-2M

### Lenses

Optical Visible & CCTV day/night lenses <sup>4</sup>	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.

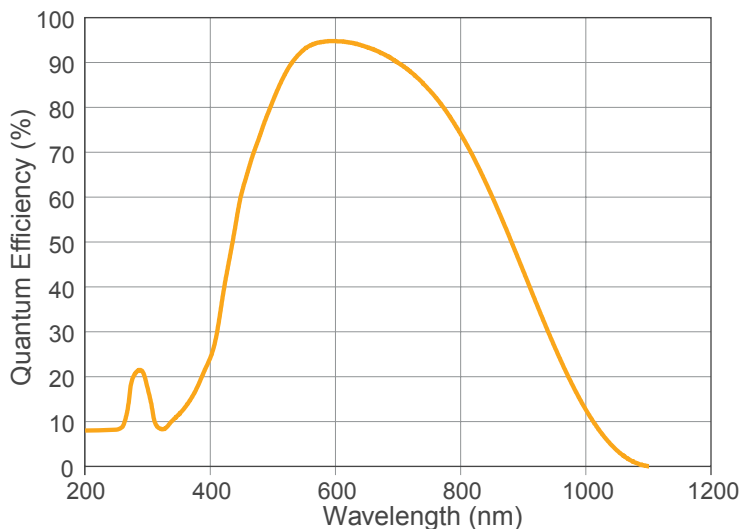
Note 3: Longer Camera Link cable available.

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

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

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

## Quantum Efficiency



## Applications

### Surveillance

- Ground Based Surveillance
- Airborne Surveillance
- UV Imaging Blue Response
- Scientific Imaging
- Situational Awareness

### Scientific

- Astronomy
- Indirect X-ray
- Microscopy
- Florescence Imaging