

Owl 320 HS SWIR

High sensitivity, digital SWIR camera

320 x 256 • Frame Rate from 25 to 346 Hz • SWIR Technology •



Key Features and Benefits

SWIR technology

- **SWIR technology**
Enables high sensitivity imaging from 0.9 μ m to 1.7 μ m
- **Easy control of camera parameters**
Control of Exposure, Frame rate, Gain, Temperature, trigger, etc
- **Ultra compact, Low power (< 5W)**
Ideal for hand-held, mobile or airborne systems
- **Rugged, No fan**
Enables integration into UAV, handheld or Electro-Optic systems

| | |
|------------------|---------------------|
| Resolution | 320 x 256 |
| Frame Rate | 25 to 346 Hz |
| CameraLink | 14bit |
| Wavelength Range | SWIR |

Specification for Owl 320 HS SWIR

| | |
|---|---|
| Sensor Type | InGaAs PIN-Photodiode |
| Active Pixel | 320 x 256 |
| Pixel Pitch | 30µm x 30µm |
| Active Area | 9.6mm x 7.68mm |
| Spectral response ¹ | 0.9µm to 1.7µm |
| Noise (RMS) - Typical | <225 electrons high gain |
| Quantum Efficiency | >70% @ 1.5µm |
| Pixel Well Depth - Typical | High Gain: >150Ke- |
| Pixel Operability | >99% |
| Digital Output Format | 14 bit CameraLink (Base Configuration) |
| Exposure time | 500ns to more than 500ms |
| Frame Rate | Up to 346Hz |
| Camera Setup / Control | CameraLink |
| Trigger interface | TTL trigger IN level |
| Image Correction | 2 point NUC (offset & gain) + pixel correction |
| Optical Interface | C mount (selection of SWIR lens available) |
| Power supply | 12V DC ±10% |
| TE Cooling | ON / OFF |
| Camera Power Consumption ² | < 5W without TEC |
| Operating Case Temperature ³ | -20°C to +55°C |
| Storage Temperature | -30°C to +60°C |
| Dimensions and Weight | 62mm x 68mm x 50mm / 390g |

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Ordering Information

Camera

| | |
|-------------------------|----------------|
| OWL SWIR digital camera | OW17CL-A |
| OWL Power Supply Cable | RPL-HR12-CBL-B |

Optional Accessories

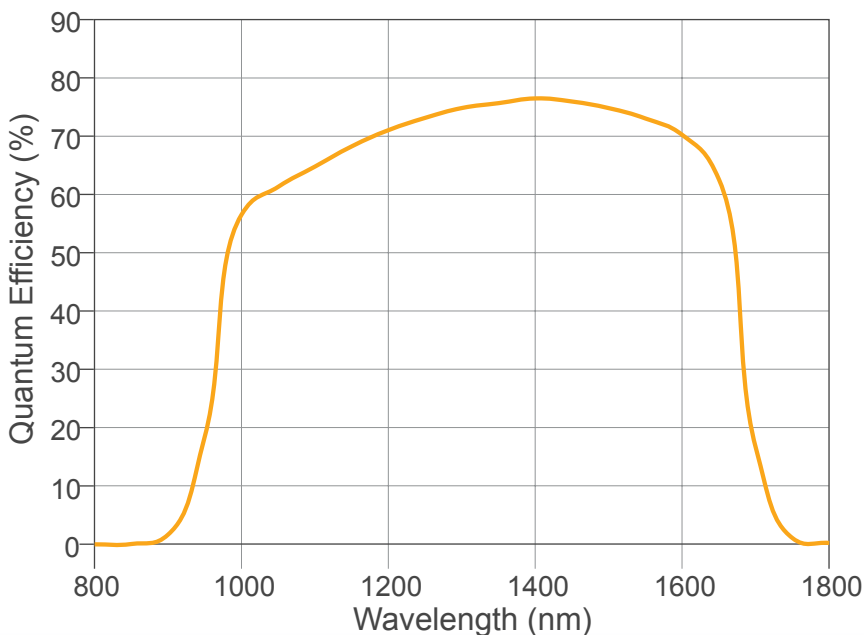
| | |
|-----------------------------------|------------------|
| EPIX(R) EB1 base CL card | RPL-EPIX-EB1 |
| EPIX(R) base notebook CL card | RPL-EPIX-ECB1-34 |
| EPIX(R) base notebook CL card | RPL-EPIX-ECB1-54 |
| EPIX(R) Xcap STD software | RPL-XCAP-STD |
| CameraLink Cable, 2m ⁴ | RPL-CL-CBL-2M |
| Optical lenses ⁵ | RPL-xx-xxxx |

Note 1: Optional filters available: Low, High or bandpass
 Note 2: Additional up to 5W with TEC switched on
 Note 3: Extended Operating Temperature range on request
 Note 4: Longer CL cable available
 Note 5: 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

Quantum Efficiency



Applications

Scientific

- Astronomy
- Beam Profiling
- Hyperspectral Imaging
- Semiconductor Inspection
- Solar Cell Inspection
- Thermography

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