

Owl 320 SWIR

High sensitivity, digital SWIR camera

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



Key Features and Benefits

SWIR technology with Optional Visible Extension

- **14 bit CameraLink output**
Enables high speed digital video with intelligent auto AGC
- **On-board Automated Gain Control (AGC)**
Enables clear video in all light conditions
- **On-board intelligent 3 point NUC**
Enables highest quality images
- **Ultra compact, Low power (< 5W)**
Ideal for hand-held, mobile or airborne systems
- **Rugged, No fan**
Enables integration into OEM platforms

Resolution	320 x 256
Frame Rate	25/30/50/60 Hz
CameraLink	14bit
Wavelength Range	SWIR

Specification for Owl 320 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 or 0.4µm to 1.7µm
Noise (RMS) - Typical	<700 electrons low gain <150 electrons high gain
Quantum Efficiency	>70% @ 1.5µm
Pixel Well Depth - Typical	Low Gain: >3Me- High Gain: >150Ke-
Pixel Operability	>99%
Digital Output Format	14 bit CameraLink (Base Configuration)
Exposure time	500ns to 1 / frame rate
Shutter mode	Global shutter
Frame Rate	25Hz, 30Hz, 50Hz or 60Hz
Optical Interface	C mount (selection of SWIR lens available)
Camera Setup / Control	CameraLink
Dynamic Range	14 bit
Trigger interface	Trigger IN and OUT - TTL compatible
Power supply	12V DC ±10%
TE Cooling	ON / OFF
Image Correction	3 point NUC (offset, Gain & Dark Current) + pixel correction
Functions controlled by serial communication	Exposure, intelligent AGC, Non Uniformity Correction, Gamma, Pk/Av, TEC, ROI
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	77mm x 68mm x 50mm / 432g

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Ordering Information

Camera

OWL SWIR digital camera OW1.7-CL-320

OWL Power Supply Cable RPL-HR4-K

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, 2m⁴ RPL-CL-CBL-2M

Optical lenses⁵ 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

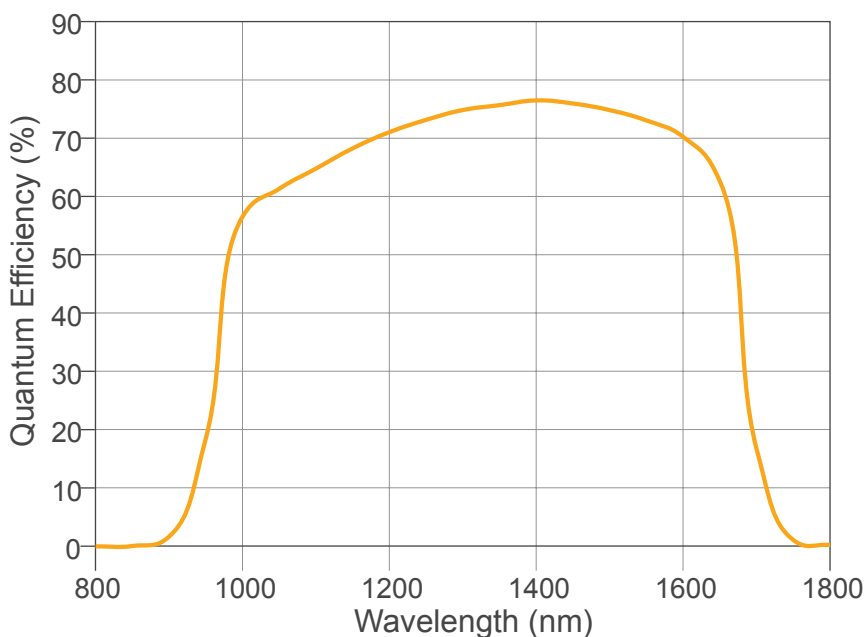


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Demo is available on request.
Pricing AOR subject to volumes.

Detailed technical drawings
can be downloaded at
www.raptorphotonics.com

Quantum Efficiency



Applications

Surveillance

- 860, 1064 & 1550nm laser line detection
- Airborne Payload
- Hand Held Goggles
- Imaging through Fog
- Range Finding
- Vision enhancement

Scientific

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

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