

Owl 320 HS VIS-SWIR

High sensitivity, digital VIS-SWIR camera

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



Key Features and Benefits

VIS- SWIR technology

- **VIS-SWIR technology**
Enables high sensitivity imaging from 0.4 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	VIS-SWIR

Specification for Owl 320 HS VIS-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	0.4µm to 1.7µm
Noise (RMS) - Typical	<225 electrons high gain
Quantum Efficiency	Peak >92% (>87% @ 1.064nm, 82% @ 1.55nm)
Pixel Well Depth - Typical	>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	50mm x 50mm x 70mm / 250g

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Ordering Information

Camera

OWL SWIR digital camera OW1.7-VS-CL-S

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

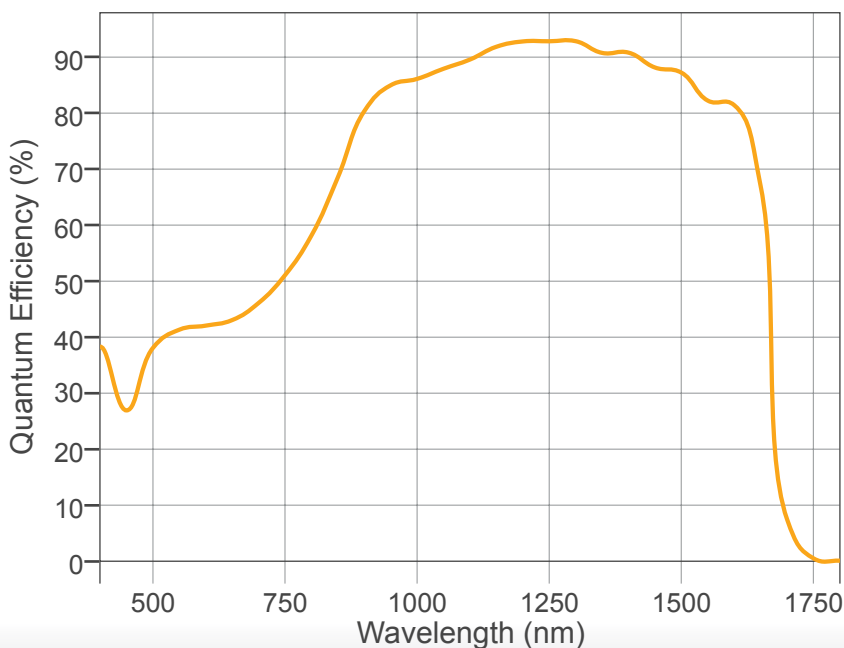
Note 4: Longer CL cable available

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

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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