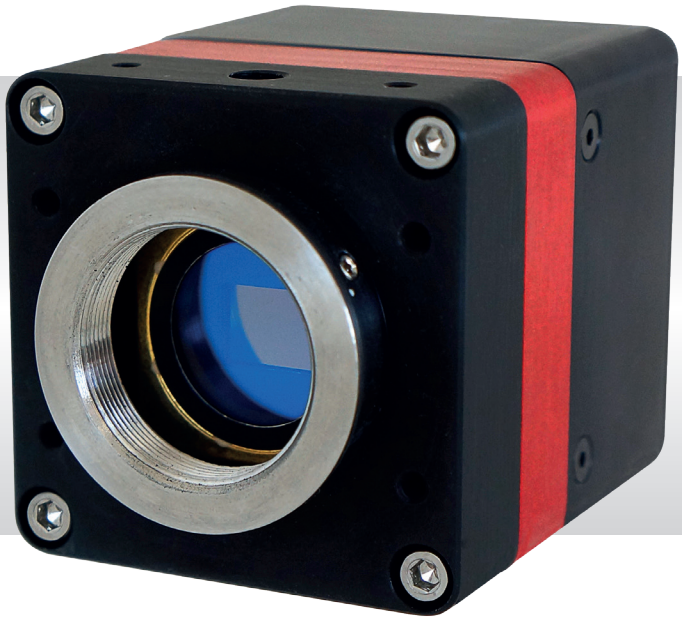
Owl 320 High Speed VIS-SWIR

High speed, digital VIS-SWIR camera
320 x 256 • 30µm x 30µm Pixel Pitch • Frame Rate up to 349Hz •



Key Features and Benefits

High-Speed VIS-SWIR Technology

- **VIS-SWIR technology**
  Enables high speed imaging from 0.4µm to 1.7µm
- **Easy control of camera parameters**
  Control of Exposure, Frame rate, Gain, Temperature, trigger, etc
- **High Speed - up to 349Hz in full frame resolution**
  Perfect for Hyperspectral Imaging applications
- **Rugged, No fan**
  Enables integration into UAV, handheld or Electro-Optic systems

Resolution	**320 x 256**
Full Frame Rate	**up to 349Hz**
Camera Link	**14 bit**
Wavelength Range	**VIS-SWIR**

Raptor photonics

www.raptorphotonics.com

Specification for Owl 320 High Speed 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
Readout Noise (RMS)[2]	High Gain: <225 electrons (202 electrons typical)
Peak Quantum Efficiency	>90% @1.3µm
Full Well Capacity	High Gain: 170ke-
Pixel Operability	>99%
Digital Output Format	14 bit Camera Link (Base Configuration)
Exposure time	500ns to [Frame Period – Readout Time]
Frame Rate[3]	Up to 349Hz
Dynamic Range (Typical)	High Gain: 59dB
Trigger interface	Trigger IN and OUT – TLL compatible
Image Correction[4]	2 point NUC (offset & gain) + pixel correction
Optical Interface	C mount (selection of SWIR lens available)
Power supply	12V DC ±0.5V
TE Cooling	Active
Camera Power Consumption[5]	<6W with TEC ON, NUC ON
Operating Case Temperature[6]	-20˚C to +55˚C
Storage Temperature	-30˚C to +60˚C
Dimensions (L*W*H)[7]	74.59mm x 50.00mm x 50.00mm
Weight	250g

Ordering Information

Camera

Owl 320 VIS-SWIR digital camera	OW1.7-VS-CL-S
Power Supply Cable	RPL-HR4-K

Optional Accessories

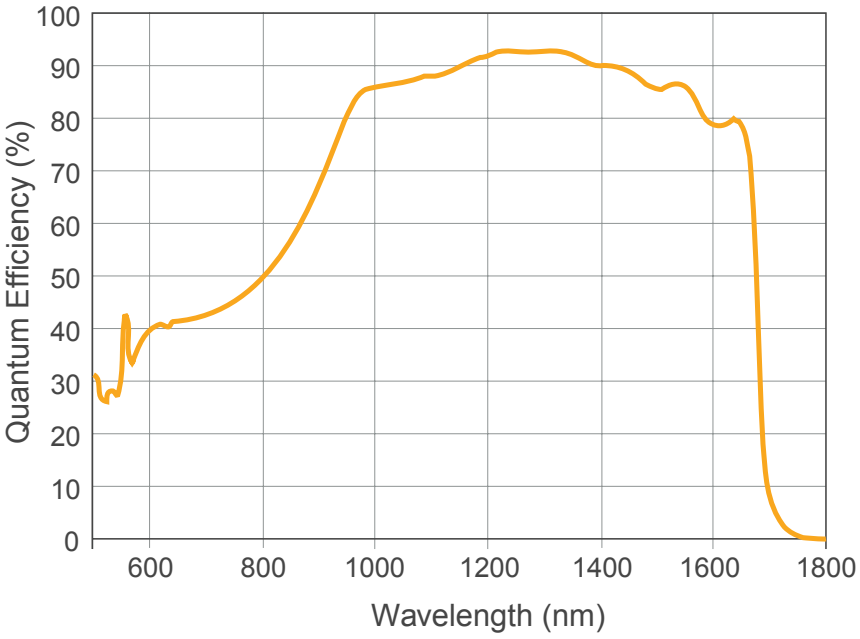
Mini PC with XCAP Std and frame grabber	RPL-PC-EL1
EPIX® EB1 frame grabber	RPL-EPIX-EB1
EPIX® XCAP Std software	RPL-XCAP-STD
Camera Link Cable (2m)[8]	RPL-MCL-CBL-2M
Optical Lenses[9]	RPL-xx-xxxx

Note 1: Optional filters available: Low, High or bandpass
Note 2: Typical readout noise is calculated from an average of the last 20 cameras shipped.
Note 3: Higher frame rates available when using ROI.
Note 4: NUC is not active when using ROI.
Note 5: Measured in an ambient of 25°C with adequate heat sinking. For full detailed power consumption values, please refer to the user manual.
Note 6: Extended operating temperature range on request.
Note 7: Dimensions include all connector parts on the camera interface.
Note 8: Longer Camera Link cable available.
Note 9: 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

*Data supplied by sensor manufacturer

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