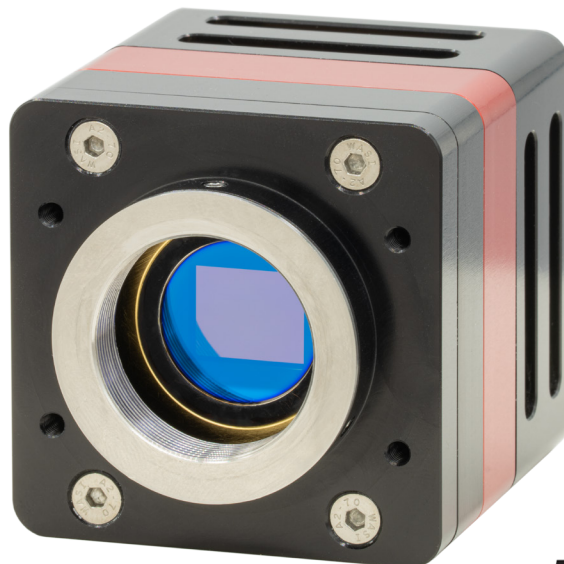


Owl 1280 SDI

1280 x 1024, VIS-SWIR camera



HDSDI

Key Features and Benefits

- **1280 x 1024, 10 μ m pitch VIS-SWIR sensor**
HD resolution imaging from 0.6 μ m to 1.7 μ m
- **On-board Intelligent 3 point NUC and ALC**
Real time, optimal video in all light conditions
- **Designed for Harsh environments**
High Shock, Vibration and extreme temperature resistance
- **Global Shutter**
30Hz full frame video, with no distortion (ideal for triggering)
- **Low Noise Electronics**
No artificial noise added, optimising low light capability
- **LHD-SDI SMPTE-274M**
Provides full HD resolution 1080p/30

Resolution	1280 x 1024
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Frame Rate	30Hz
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HD-SDI	1080p/30
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Wavelength Range	VIS-SWIR
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Specification for Owl 1280

Sensor	InGaAs PIN-Photodiode
Active Pixel	1280 x 1024
Pixel Pitch	10µm x 10µm
Active Area	12.8mm x 10.24mm
Spectral Response ¹	0.6µm to 1.7µm
Readout Noise (RMS) ²	LG: <180 electrons (160e- typical) HG: <50 electrons (28e- typical)
Peak Quantum Efficiency	>90% @1.3µm
Full Well Depth	LG: 450ke- HG: 10ke-
Pixel Operability	>99.5%
Dark Current	<19,000 @15° C
Digital Output Format	10 bit serial SMPTE274M 1080 p/30
Exposure Time	LG: 50µs to 25.8ms
Shutter Mode	Global Shutter
Frame Rate	30Hz
Optical Interface ¹	C Mount (selection of SWIR Lens available)
Dynamic Range (Typ)	LG:69dB HG:51dB
Trigger Interface	Trigger IN and OUT-TTL compatible
Power Supply	12V DC ± 0.5V
TE Cooling	Active
Image Correction	3 point NUC offset,gain and dark current) + pixel correction
Functions controlled by serial communication	Exposure,intelligent AGC,Non Uniformity Correction,Gamma,Pk/ Av,TEC,ALCROI
Camera Power Consumption ²	<4W with TEC ON,NUC ON
Operating Temperature ³	-20 to + 55° C
Storage Temperature ⁴	-30 to + 60° C
Dimensons (excluding standard mounting) ⁵	68.8mm x 46mm x 49.5 mm
Weight	240g

Specification for Owl 1280

Camera

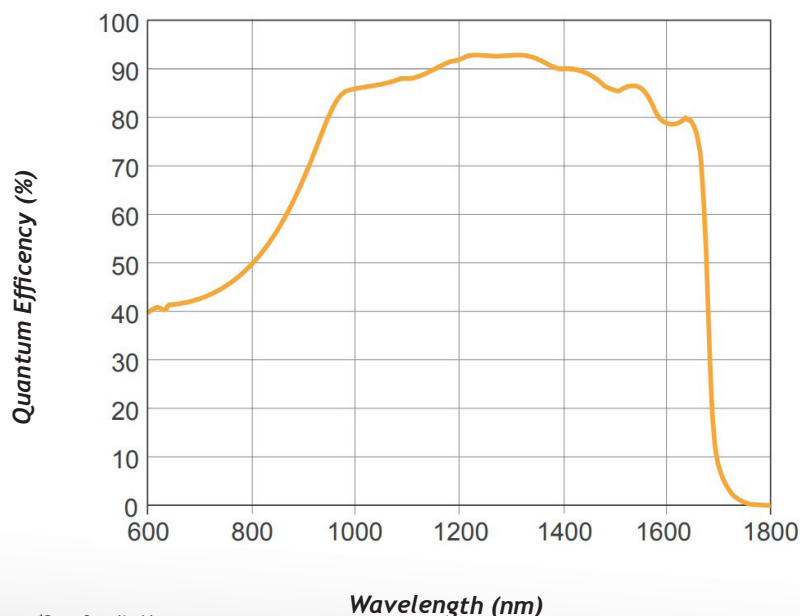
OWL 1280 Digital Camera	OW1.7-VS-SD-1280-OEM7
Power & Comms Cable without D-type(Flying leads)	RPL-SDPC-CBL-FL-VERT
Power & Comms Cable with D-type	RPL-SDPC-CBL-D-VERT
Video Out HDSDI 12 inch Cable	RPL-HDSDI-CBL-12

Optional Accessories

Optical SWIR Lenses ⁶	RPL-xx-xxx
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Applications

- 860,1064 & 1550nm laser line detection
- Active Imaging
- Airborne Payload
- Handheld Systems
- Imaging through Fog
- Range Finding
- Vision Enhancement
- Hyperspectral Imaging
- Semi Conductor Inspection
- Solar Cell Inspection



¹Data Supplied by Sensor Manufacturer

For detailed technical drawings, volume pricing or to set up a demo, contact us at sales@raptorphotronics.com

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