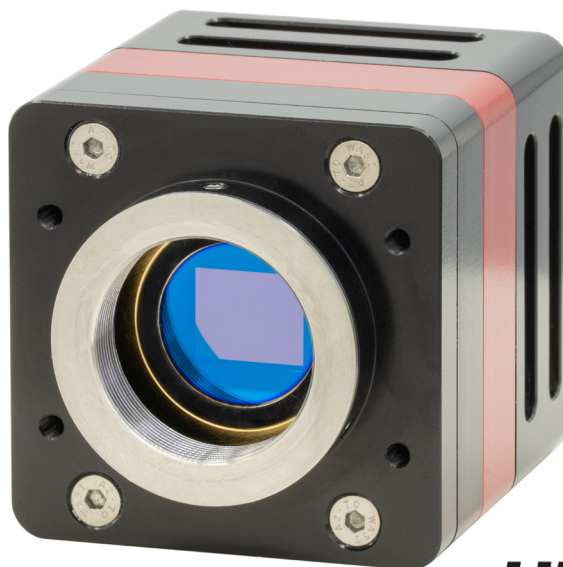


Owl 640 T SDI

640 x 512, VIS-SWIR camera



HDSDI

Key Features and Benefits

- **640 x 512, 10 μ m pitch VIS-SWIR sensor**
VGA 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

Resolution	640 x 512
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Frame Rate	30Hz
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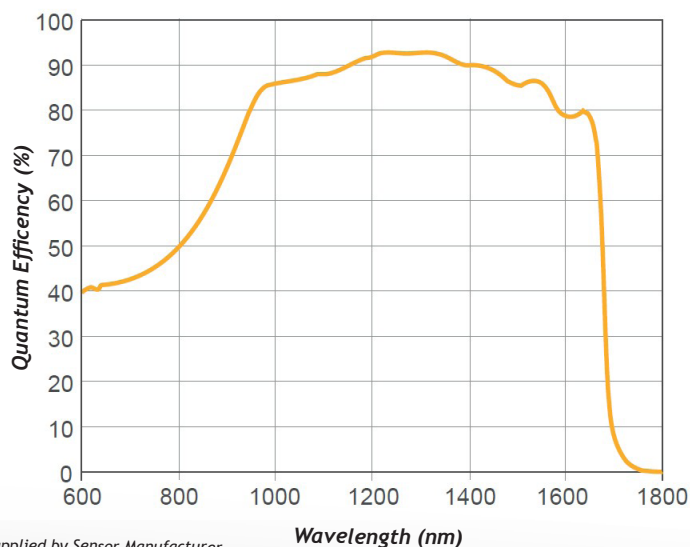
HD-SDI	1080p/30
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Wavelength Range	VIS-SWIR
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Specification for Owl 640 T

Sensor	InGaAs PIN-Photodiode
Active Pixel	640 x 512
Pixel Pitch	10 μm x 10 μm
Active Area	6.4mm x 5.12mm
Spectral Response ¹	0.6 μm to 1.7 μm
Readout Noise (RMS) ²	LG: <180e- (160e- typical) HG: <50e- (28e- typical)
Peak Quantum Efficiency	>90% @1.3 μm
Full Well Capacity	LG: 450ke- HG: 10ke-
Pixel Operability	>99.5%
Digital Output Format	10 bit serial SMPTE274M 1080 p/30
Exposure Time	LG: 10 μs to 92.5ms HG: 10 μs to 86.5ms
Shutter Mode	Global Shutter
Frame Rate	30Hz
Optical Interface	C Mount
Communication	RS422
Dynamic Range (Typ)	LG: 69dB HG: 51dB
Trigger Interface	Trigger IN and OUT - TTL compatible
Power Supply	12V DC $\pm$ 0.5V
TE Cooling	Active
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, ALC ROI
Camera Power Consumption ³	<4W with TEC ON, NUC ON
Operating Temperature ⁴	-20°C to +55°C
Storage Temperature	-30°C to +60°C
Dimensions (excluding standard mounting) ⁵	68.7mm x 50mm x 50mm
Weight	240g

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*Data Supplied by Sensor Manufacturer

Specification for Owl 640 T

Camera

OWL 640 T Digital Camera OW1.7-VS-SD-640-T-OEM4

Power & Comms Cable with RPL-SDPC-CBL-D-VERT D-type

Power & Comms Cable w/o RPL-SDPC-CBL-FL-VERT D-type

Optional Accessories

Optical Lenses⁶ RPL-xx-xxx

Applications

- HD long range day / night SWIR imaging
- Airborne and Ground Payload
- Hand Held Systems
- Driving Vision Enhancement (DVE)
- Airborne EVS
- Vision enhancement
- Astronomy
- Beam Profiling
- Hyperspectral Imaging
- Semiconductor Inspection
- Solar Cell Inspection
- Thermography

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

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