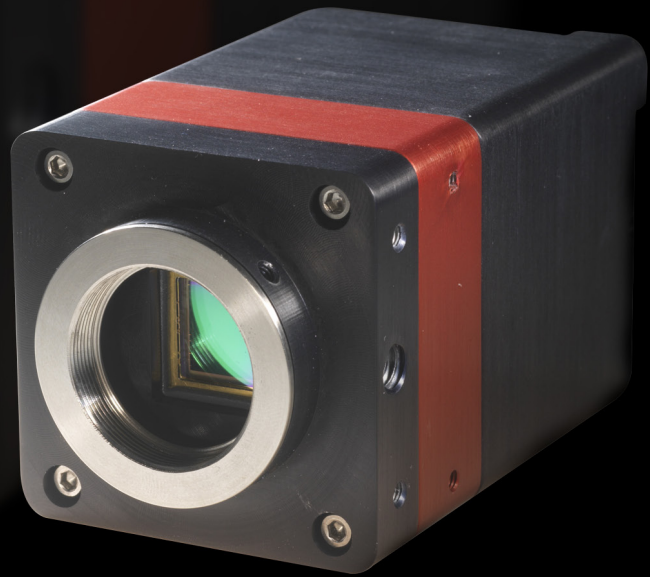


OWL SW1.7HS

Rugged, high sensitivity, high speed VIS-SWIR camera

Preliminary



Key Features and Benefits

High speed and high performance SWIR technology

- **SWIR technology.**
Enables high sensitivity imaging from 0.9mm to 1.7mm
- **Optional Visible extention.**
Enables high sensitivity imaging from 0.4mm to 1.7mm
- **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 any Electro-Optic system

Resolution 320 x 256

Frame Rate 25 to 346Hz

Wavelength Range VIS-SWIR

CameraLink 16 bit

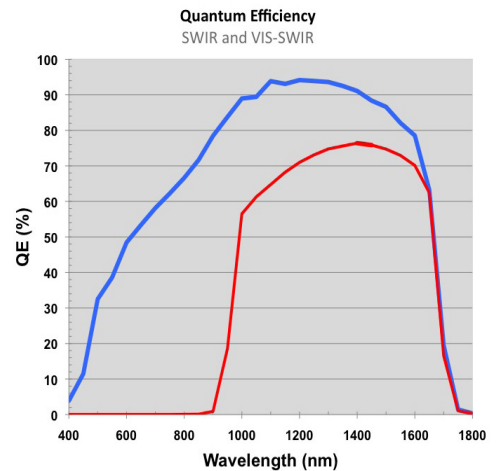


..... Capturing Tomorrow

Specification for OWL SW1.7HS

FPA Specification	
Sensor	Alcatel-Thales III-V Lab
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)	<150 electrons
Quantum Efficiency	>70% @ 1.5µm
Pixel Operability	>99%
Camera Specification	
Output Format	14 bit CameraLink
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
Relative Gain	High & Low Capacitance (x1 - x21)
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 & Weight	50mm x 50mm x 82mm / 282g

Quantum Efficiency

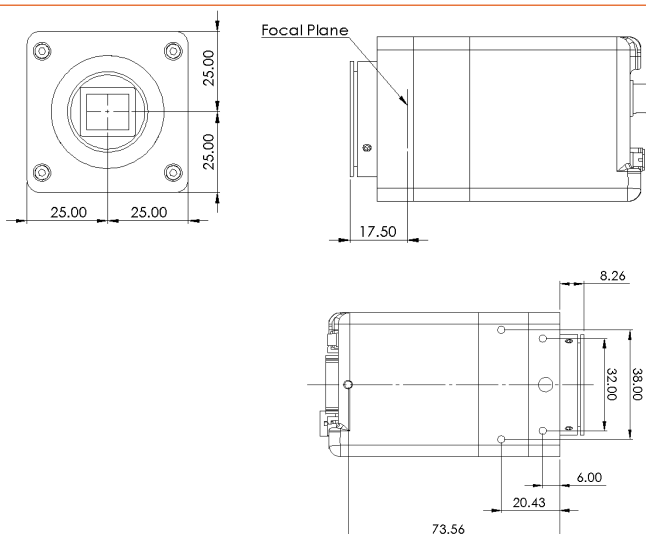


Sample Applications

- 860, 1064 & 1550nm laser line detection
- Active Imaging
- Airborne Payload
- Hand Held Goggles
- Imaging through fog
- Range finding
- Vision enhancement
- Semiconductor Inspection
- Solar Cell Inspection
- Telecommunications
- Thermography
- Astronomy
- Telecommunications

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Note 1: Optional filters available: Low, High or bandpass **Note 2:** Additional 5W with TEC switched on **Note 3:** Extended Operating Temperature range on request

Dimensions



Document #: OWL1.7HS0912PR1

Ordering Information

Camera	
OWL SWIR analogue camera	OWL1.7-A
OWL A Power Supply Cable	RPL-OW-A-CBL
OWL SWIR digital camera	OWL1.7-CL
OWL D Power Supply Cable	RPL-OW-D-CBL
Optional Accessories	
Epix base CL card	RPL-EPIX-EB1
Epix Analogue Video card	RPL-EPIX-SV5
Epix base notebook CL card	RPL-EPIX-ECB1-54
Epix Xcap ltd software	RPL-XCAP-LTD
CameraLink Cable, 2m ⁴	RPL-CL-CBL-2M
Optical SWIR lenses ⁵	RPL-xx-xxxx

Note 4: Longer CL cable available

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

Equipment may require UK Government authorisation for export purposes