Owl 1280 VIS-SWIR

High resolution, High Sensitivity, Digital VIS-SWIR camera
1280 x 1024 VIS-SWIR • 10µm x 10µm • <50e readout noise

Key Features and Benefits

The best performing HD VIS-SWIR camera in the World!

- **1280 x 1024, 10µm pitch VIS-SWIR technology**
  Enables highest resolution imaging from 0.4µm to 1.7µm

- **<50 electrons readout noise**
  Enables highest VIS-SWIR detection limit

- **On-board Automated Gain Control (AGC)**
  Enables clear video in all light conditions

- **On-board Intelligent 3 point NUC**
  Enables highest quality photos

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>1280 x 1024</td>
</tr>
<tr>
<td>Frame rate</td>
<td>10 to 60Hz</td>
</tr>
<tr>
<td>Camera link</td>
<td>12bit</td>
</tr>
<tr>
<td>Wavelength Range</td>
<td>VIS-SWIR</td>
</tr>
</tbody>
</table>
Specification for Owl 1280 VIS-SWIR

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<thead>
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<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td><strong>Sensor Type</strong></td>
<td>InGaAs PIN-Photodiode</td>
</tr>
<tr>
<td><strong>Active Pixel</strong></td>
<td>1280 x 1024</td>
</tr>
<tr>
<td><strong>Pixel Pitch</strong></td>
<td>10µm x 10µm</td>
</tr>
<tr>
<td><strong>Active Area</strong></td>
<td>12.8mm x 10.24mm</td>
</tr>
<tr>
<td><strong>Spectral response</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Quantum Efficiency</strong></td>
<td>&gt;80% @ 1.55µm</td>
</tr>
<tr>
<td><strong>Full Well Capacity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pixel Operability</strong></td>
<td>&gt;99.5%</td>
</tr>
<tr>
<td><strong>Dark Current (e/p/s)</strong></td>
<td>&lt;19,000 @ 15°C</td>
</tr>
<tr>
<td><strong>Digital Output Format</strong></td>
<td>12 bit Camera Link (medium configuration)</td>
</tr>
<tr>
<td><strong>Exposure time</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Shutter mode</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Frame Rate</strong></td>
<td>10 to 60Hz</td>
</tr>
<tr>
<td><strong>Optical Interface</strong></td>
<td>C mount (selection of SWIR lens available) or M42</td>
</tr>
<tr>
<td><strong>Dynamic Range</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Trigger interface</strong></td>
<td>Trigger IN and OUT - TTL compatible</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>12V DC ±0.5V</td>
</tr>
<tr>
<td><strong>TE Cooling</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Image Correction</strong></td>
<td>3 point NUC (offset, Gain &amp; Dark Current) + pixel correction</td>
</tr>
<tr>
<td><strong>Functions controlled by serial communication</strong></td>
<td>Exposure, intelligent AGC, Non Uniformity Correction, Gamma, Px/Av, TEC, ROI</td>
</tr>
<tr>
<td><strong>Camera Power Consumption</strong></td>
<td>&lt;3W with TEC OFF, NUC ON</td>
</tr>
<tr>
<td><strong>Operating Case Temperature</strong></td>
<td>-20°C to +55°C</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-30°C to +60°C</td>
</tr>
<tr>
<td><strong>Dimensions (L<em>W</em>H)</strong></td>
<td>61.15mm x 50.00mm x 50.00mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>247g</td>
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**Applications**

- **Surveillance**
  - HD long range day / night SWIR imaging
  - Airborne and Ground Payload
  - Hand Held Goggles
  - Driving Vision Enhancement (DVE)
  - Airborne EVS
  - Vision enhancement

- **Scientific**
  - Astronomy
  - Beam Profiling
  - Hyperspectral Imaging
  - Semiconductor Inspection
  - Solar Cell Inspection
  - Thermography

**Ordering Information**

**Camera**

- Owl 1280 VIS-SWIR digital camera
- Power Supply Cable
- RPL-PC-EL1

**Optional Accessories**

- Mini PC with Xcap STD and frame grabber
- RPL-EPIX-E8
- EPIX® XCAP STD software
- RPL-XCAP-STD
- CameraLink Cable, 2m (x2)
- RPL-MCL-CBL-2M
- Optical Lenses
- RPL-xx-xxxx

**Ordering Information**

- Camera
- Owl 1280 VIS-SWIR digital camera
- Power Supply Cable
- RPL-HR4-K

**Applications**

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**Demo** is available on request. Pricing AOR subject to volumes.