Capture clear, crisp, planetary, lunar and solar images with Lumenera’s SKYnyx (USB 2.0), Lt Series (USB 3.0) and INFINITY (research-grade) cameras.

These digital cameras have been specifically designed with both amateur and professional photographers in mind, featuring high sensitivity, low noise and extremely fast frame rates with reliable delivery of images. The USB 2.0 and 3.0 digital interfaces ensure a simple plug-and-play installation, and one standard cable minimizes equipment clutter.

The SKYnyx, INFINITY and Lt series are supported by an experienced team of technical support and imaging experts. We understand your imaging needs and are here to help you get the most out of your camera.

Contact us to determine how you can benefit from Lumenera’s high-quality reliable products.
USB 2.0

SKYnyx Planetary Astrophotography Cameras

The SKYnyx family of cameras offer high sensitivity Sony CCD sensors, and are powered directly off the USB 2.0 bus with no requirement for external power.* Advanced features such as selection of Region of Interest (ROI) and binning provide extremely high frame rates with no data compression. Superior signal to noise ratios meet astrophotographers demanding needs for high quality images. All SKYnyx cameras have a rugged, anodized aluminum enclosure, providing years of uncompromised imaging and excellent performance.

*An adapter jack is incorporated into the camera design to allow for external power, if USB bus power is unavailable or insufficient.

Camera Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Optical Format</th>
<th>Pixel Pitch</th>
<th>FPS</th>
<th>Bit Depth</th>
<th>Read Noise</th>
<th>Dynamic Range</th>
<th>Dark Current **</th>
<th>Well Depth</th>
<th>Lens Mount</th>
<th>Color/Mono</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKYnyx2-0</td>
<td>640 x 480</td>
<td>1/3&quot;</td>
<td>7.4 µm x 7.4 µm</td>
<td>60</td>
<td>8 or 12</td>
<td>10 e-</td>
<td>58dB</td>
<td>&lt;1 e-/s</td>
<td>40,000 e-</td>
<td>T</td>
<td>Color or Mono</td>
</tr>
<tr>
<td>SKYnyx2-1</td>
<td>1392 x 1040</td>
<td>1/2&quot;</td>
<td>4.65 µm x 4.65 µm</td>
<td>15</td>
<td>8 or 12</td>
<td>12 e-</td>
<td>66dB</td>
<td>&gt;2 e-/s</td>
<td>10,000 e-</td>
<td>T</td>
<td>Color or Mono</td>
</tr>
<tr>
<td>SKYnyx2-2</td>
<td>1616 x 1232</td>
<td>1/1.8&quot;</td>
<td>4.4 µm x 4.4 µm</td>
<td>12</td>
<td>8 or 12</td>
<td>12 e-</td>
<td>66dB</td>
<td>&gt;2 e-/s</td>
<td>14,000 e-</td>
<td>T</td>
<td>Color or Mono</td>
</tr>
</tbody>
</table>

**Measured at 25°C.

Astro Imaging Software

Control your SKYnyx camera and capture images through our 3rd party software partners. Lumenera is integrated with the most popular commercial, shareware and freeware vendors, including:

- AstroArt (MSB Software)
- K3CCD Tools (K3)
- LUCAM Recorder (Heiko Wilkens)
- MaxIm DL (Cyanogen)
- StreamPix (NorPix)

Lumenera’s SKYnyx astrophotography cameras also support a DirectShow interface, allowing camera control by any DirectShow compliant application.

 Capture clear, crisp, planetary, lunar & solar images with Lumenera’s SKYnyx cameras.
USB 3.0

Lt Camera Series

Lumenera’s Lt225 and Lt425 are the first of an exciting new family of USB 3.0 high performance cameras based on the industry leading CMOSIS CMV2000 and CMV4000 global shutter sensors. The incredibly fast USB 3.0 interface, combined with these two CMOS sensors, has resulted in high sensitivity cameras well suited for applications requiring high-speed image acquisition and exceptional performance, such as astronomy.

Highlights

• Very high frame rates up to 170 fps
• Blur-free global shutter CMOS sensor
• 2 and 4 megapixel CMOSIS color, mono, NIR solutions
• Built-in frame buffering
• C-mount

Camera Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Optical Format</th>
<th>Pixel Pitch</th>
<th>FPS</th>
<th>Bit Depth</th>
<th>Read Noise</th>
<th>Dynamic Range</th>
<th>Dark Current *</th>
<th>Well Depth</th>
<th>Lens Mount</th>
<th>Color/Mono</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lt225</td>
<td>2048 x 1088</td>
<td>2/3&quot;</td>
<td>5.5 µm</td>
<td>170</td>
<td>8 or 12</td>
<td>13 e-</td>
<td>60 dB</td>
<td>125 e-/s</td>
<td>13,500 e-</td>
<td>C</td>
<td>Color, Mono or NIR</td>
</tr>
<tr>
<td>Lt425</td>
<td>2048 x 2048</td>
<td>1&quot;</td>
<td>5.5 µm</td>
<td>90</td>
<td>8 or 12</td>
<td>13 e-</td>
<td>60 dB</td>
<td>125 e-/s</td>
<td>13,500 e-</td>
<td>C</td>
<td>Color, Mono or NIR</td>
</tr>
</tbody>
</table>

*Measured at 25°C.

USB 2.0

INFINITY Camera Series

Effortlessly capture challenging lunar and planetary images in complex lighting situations with Lumenera’s research-grade INFINITY cameras. The INFINITY2-1R and INFINITY3-1UR contain extremely low noise electronics, high grade components, and Lumenera’s unique thermal management technology. These cameras offer a reduced dark current noise, providing long exposures for astronomy applications.

Highlights

• Ultra-sensitive Sony ICX285 1.4 megapixel sensor
• Thermoelectric uncooled camera models
• Research-grade cameras with extremely high dynamic range
• 12 or 14-bit output for quantitative applications
• Easily manages seconds of exposure time with a dark current rating of less than 1 e-/s
• Ultra low noise
• C-mount

Camera Specifications

<table>
<thead>
<tr>
<th>Model</th>
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<th>Dynamic Range</th>
<th>Dark Current *</th>
<th>Well Depth</th>
<th>Lens Mount</th>
<th>Color/Mono</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFINITY2-1R</td>
<td>1392 x 1040</td>
<td>1/2&quot;</td>
<td>4.65 µm</td>
<td>30*</td>
<td>8 or 14</td>
<td>8.5 e-</td>
<td>64.6 dB</td>
<td>&lt; 1 e-/s</td>
<td>13,500 e-</td>
<td>C</td>
<td>Color or Mono</td>
</tr>
<tr>
<td>INFINITY3-1UR</td>
<td>1392 x 1040</td>
<td>2/3</td>
<td>6.45 µm</td>
<td>30</td>
<td>8 or 14</td>
<td>6 e-</td>
<td>70 dB</td>
<td>&lt; 1 e-/s</td>
<td>18,500 e-</td>
<td>C</td>
<td>Color or Mono</td>
</tr>
</tbody>
</table>

*30 fps with INFINITY Capture.

*Measured at 22°C.
To better serve you, Lumenera has forged strategic partnerships with distributors and system integrators worldwide. Please contact us at 1 (613) 736-4077 or astronomy@lumenera.com for details on how to order, or to join our partner program.

USB 2.0 & USB 3.0

Astrophotography Cameras