Linea 2K and 4K
Monochrome CMOS Line Scan Cameras

High Performance, Low Cost

The new Linea™ family of line scan cameras provides the uncompromising performance and rich feature-set found in Teledyne DALSA’s high-end line scan cameras at an unprecedented price point.

Based on the most advanced CMOS line scan technology Linea employs a 2K or 4K single line 7.04 µm x 7.04 µm pixel array at an 80 kHz maximum line rate. With excellent sensitivity and speed, Linea surpasses the requirements of demanding applications—such as materials grading and inspection, transportation safety, and general purpose machine vision.

Linea is a compact, light weight and robust camera with many attractive features, including full-fledged flat-field correction, multiple ROI and AOI, smart triggers through programmable GPIO, multiple user configuration sets, and calibration coefficients for various lighting conditions.

GenICam™ compliant Linea is easy to set up and integrate using a GUI, such as Teledyne DALSA’s Sapera™ camera configuration utility CamExpert.

Specifications

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>2048 or 4096 pixels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line Rate</td>
<td>80 kHz, maximum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pixel Size</td>
<td>7.04 µm x 7.04 µm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Format</td>
<td>8 or 12 bit selectable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lens Mount</td>
<td>M42 x 1, C and F-mount adapters available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsivity</td>
<td>320 DN / (nJ / cm²) in 12 bit at 1x gain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>&gt; 60 dB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal Gain Range</td>
<td>1x to 10x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>62 mm x 62 mm x 37 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass</td>
<td>&lt; 270 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temp</td>
<td>0 °C to +65 °C (front plate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>+5 V to +24 V DC, Hirose 6-pin or PoCL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Dissipation</td>
<td>&lt; 4.5 W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control &amp; Data</td>
<td>SDR-26 mini Camera Link</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Models

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Resolution</th>
<th>Maximum Line Rates</th>
<th>Pixel Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA-CM-02K08A-00-R</td>
<td>2048</td>
<td>80 kHz</td>
<td>7.04 µm x 7.04 µm</td>
</tr>
<tr>
<td>LA-CM-04K08A-00-R</td>
<td>4096</td>
<td>80 kHz</td>
<td>7.04 µm x 7.04 µm</td>
</tr>
</tbody>
</table>

Key Features

- High speed: up to 80 kHz
- 2048 or 4096 pixel resolution
- Low cost and compact

Programmability

- Multiple regions of interest and areas of interest for calibration and data reduction
- 8 or 12 bit output, selectable
- Smart flat field and lens shading correction
- 8 programmable coefficient sets
- Flexible signalling and synchronization

Typical Applications

- Automated optical inspection
- Security systems
- High performance sorting systems
- Materials grading and inspection systems
- Web inspection
- General purpose machine vision

Regulatory Compliance

- CE, FCC and RoHS
Linea 2K and 4K
Monochrome CMOS Line Scan Cameras

www.teledynedalsa.com

Americas
Boston, USA
+1 978-670-2000
sales.americas@teledynedalsa.com

Europe
Krailling, Germany
+49 89-89-54-57-3-80
sales.europe@teledynedalsa.com

Asia Pacific
Tokyo, Japan
+81 3-5960-6353
sales.asia@teledynedalsa.com

Shanghai, China
+86 21-6427-9081
sales.asia@teledynedalsa.com

Teledyne DALSA reserves the right to make changes at any time without notice. Teledyne DALSA © 2016.
Revision number 03-070-20078-01. Revision date October 31, 2016.