High Performance, Low Cost

The new Linea™ line scan cameras deliver the exceptional performance and features found in Teledyne DALSA’s current lineup of high-end cameras at an unprecedented price point.

Based on the most advanced CMOS line scan technology, Linea cameras employ an 8k 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 flat-field correction, multiple ROI, smart triggers and 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, or an ASCII interface using three letter commands.

Specifications

- **Resolution**: 8192 pixels
- **Line Rate**: Up to 80 kHz
- **Pixel Size**: 7.04 µm x 7.04 µm
- **Data Format**: 8 or 12 bit selectable
- **Output**: Base, Medium, and Full Camera Link
- **Responsivity**: 320 DN / (nJ / cm²) in 12 bit @ 1x gain
- **Dynamic Range**: > 60 dB
- **Nominal Gain Range**: 1x to 10x
- **Size**: 76.0 mm x 76.0 mm x 36.7 mm
- **Mass**: < 250 g
- **Operating Temp**: 0 °C to 65 °C (front plate)
- **Power**: Hirose 6-pin, 5 V to 24 V DC
- **Power Dissipation**: 8 W
- **Control & Data**: SDR-26 mini Camera Link

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-08K08A-00-R</td>
<td>8192</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
- 8192 pixel resolution
- Low cost and compact
- Camera Link interface

Programmability

- GenICam or ASCII compliant interfacing
- Multiple Regions 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