High Performance GigE Camera with TurboDrive™

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, the Linea GigE cameras employ a 2k or 4k single line 7.04 \( \mu \text{m} \times 7.04 \mu\text{m} \) pixel array and a line rate up to 80 kHz using Teledyne DALSA’s TurboDrive and Sapera™ LT GigE Vision driver. 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.

The Linea cameras come complete with many attractive features, including Cycling Mode, configurable GPIO ports, Burst Mode and Meta Data per each line. Like the Camera Link models, the GigE models provide multiple ROI, and multiple user and calibration coefficients sets for various lighting conditions.

Our proprietary, patent pending, TurboDrive™ technology delivers high speed data transfer capability that breaks through the GigE limit. TurboDrive boosts data transfer up to 2 or 3 times faster than standard GigE Vision speeds – with no loss of image quality.

Specifications

- **Resolution**: 2048 or 4096 pixels
- **Line Rate**: Up to 80 kHz, using TurboDrive and the Sapera LT driver
- **Pixel Size**: 7.04 \( \mu \text{m} \times 7.04 \mu\text{m} \)
- **Data Format**: 8 or 12 bit selectable
- **Output**: Gigabit Ethernet
- **Lens Mount**: M42 x 1, C and F-mount adapters available
- **Responsivity**: 320 DN / (nJ / cm²) in 12 bit at 1x gain
- **Dynamic Range**: > 60 dB
- **Nominal Gain Range**: 1x to 10x
- **Size**: 62 mm x 62 mm x 46.7 mm
- **Mass**: < 280 g
- **Operating Temp**: 0 °C to 65 °C (front plate)
- **Power**: 12 V to 24 V DC, HD15 connector (shared with I / O)
- **Power Dissipation**: < 6 W
- **I / O**: HD15 connector
- **Software Platform**: GigE Vision v1.2 compliant Teledyne DALSA Sapera LT or 3rd party GenICam™ compliant SDK

### 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-GM-02K08A-00-R</td>
<td>2048</td>
<td>80 kHz, Sapera LT</td>
<td>7.04 ( \mu \text{m} \times 7.04 \mu\text{m} )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52 kHz, standard</td>
<td></td>
</tr>
<tr>
<td>LA-GM-04K08A-00-R</td>
<td>4096</td>
<td>80 kHz, Sapera LT</td>
<td>7.04 ( \mu \text{m} \times 7.04 \mu\text{m} )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26 kHz, standard</td>
<td></td>
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