

Linea 8K GigE Vision

Monochrome CMOS Line Scan Cameras



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 an 8k single line $7.04 \mu\text{m} \times 7.04 \mu\text{m}$ pixel array. 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 AOI, 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. Depending on the application, speeds up to 45 kHz are achievable, as TurboDrive boosts data transfer 2 or 3 times faster than standard GigE Vision™ speeds – with no loss of image quality.

Key Features

- Low cost and compact
- Cycling mode
- Burst mode
- Meta data per each line

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
- 4 programmable coefficient sets
- Configurable GPIO ports, timers and counters

Typical Applications

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

Regulatory Compliance

- CE, FCC and RoHS

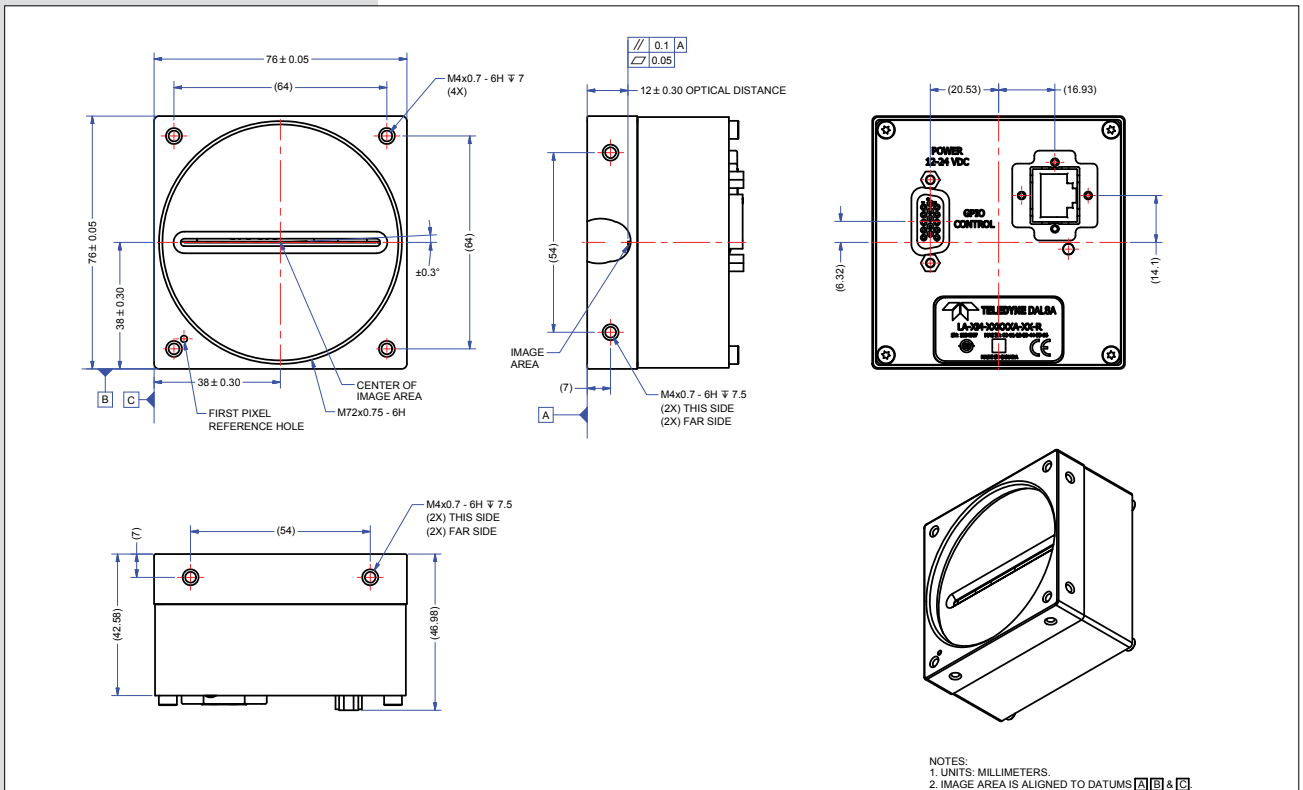
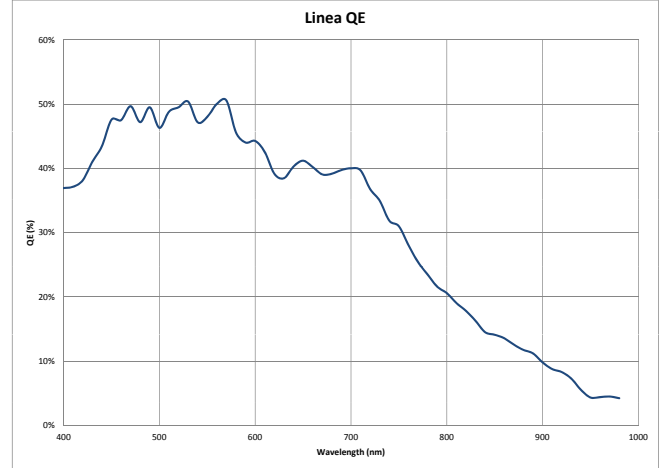
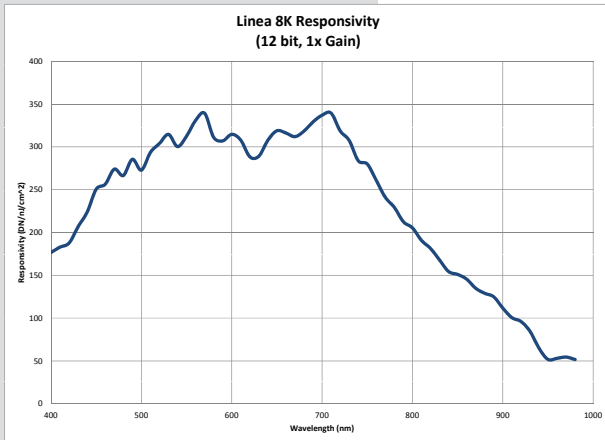
Specifications

| | |
|--------------------|---|
| Resolution | 8192 pixels |
| Line Rate | 13 kHz, maximum—without TurboDrive (45 kHz, maximum—with TurboDrive) |
| 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 | M72 x 0.75, F-mount adapters available |
| Responsivity | $340 \text{ DN} / (\text{nJ} / \text{cm}^2)$ in 12 bit at 1x gain |
| Dynamic Range | > 60 dB |
| Nominal Gain Range | 1x to 10x |
| Size | 76.0 mm x 76.0 mm x 46.7 mm |
| Mass | < 380 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 | < 7.5 W |
| I / O | HD15 connector |
| Software Platform | GigE Vision v1.2 compliant Teledyne DALSA Sapera LT or 3rd party GenICam™ compliant SDK |

| Models | | | |
|-------------------|------------|---|--|
| Part Number | Resolution | Maximum Line Rates | Pixel Size |
| LA-GM-08K08A-00-R | 8192 | 13 kHz without TurboDrive (45 kHz with TurboDrive) | $7.04 \mu\text{m} \times 7.04 \mu\text{m}$ |

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