

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 and a 13 kHz line rate. Speeds of up to 45 kHz are achievable with TurboDrive. 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.

Key Features

- Low cost and compact
- Line rates up to 45 kHz with TurboDrive
- Cycling mode
- Burst mode
- Meta data per each line

Programmability

- Multiple Regions 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

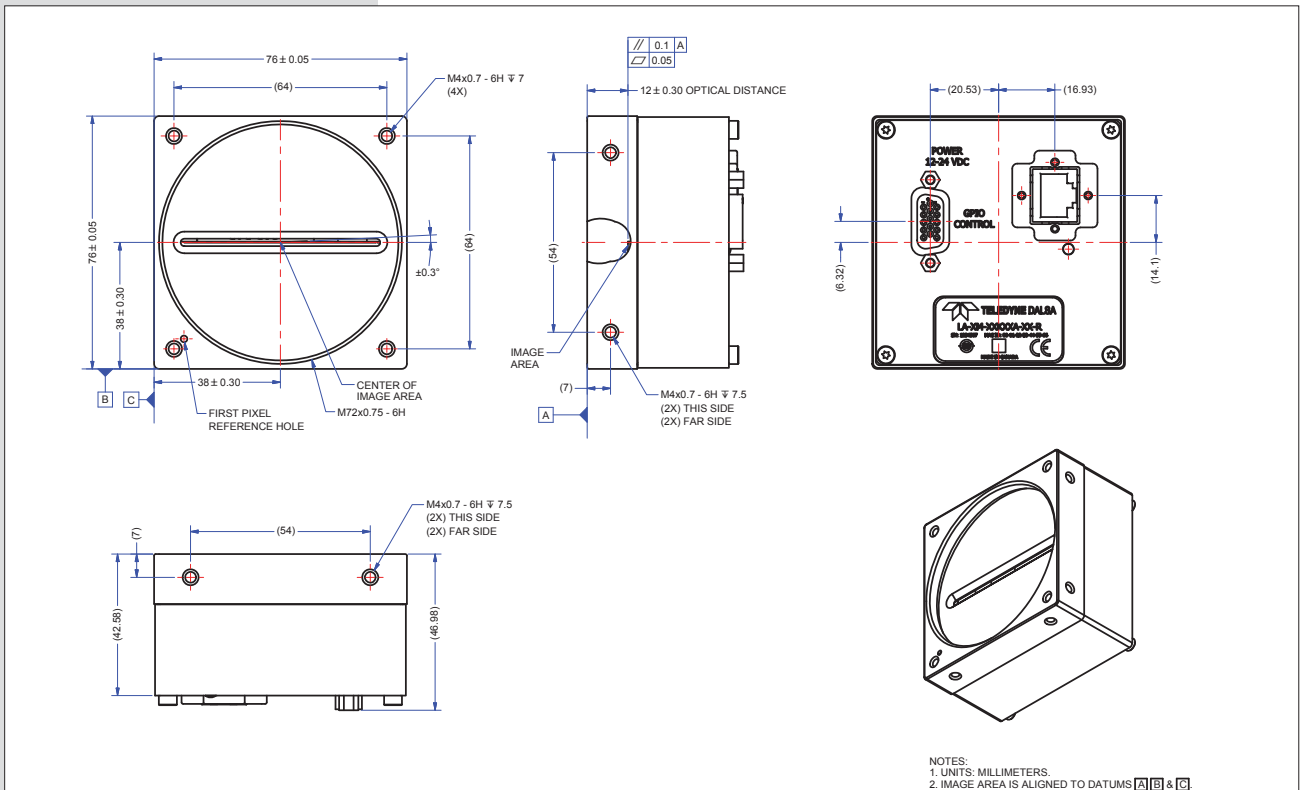
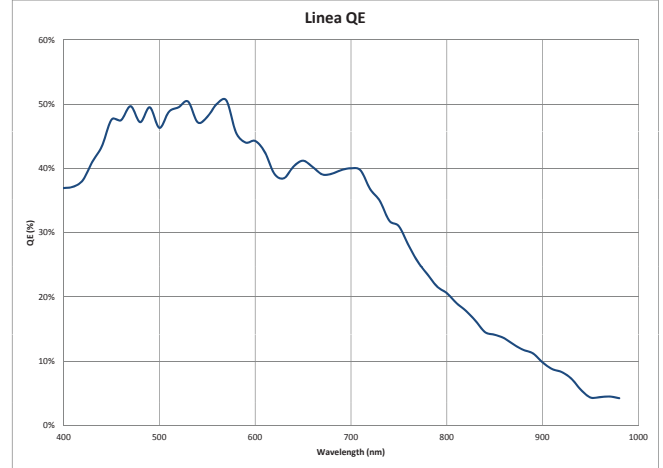
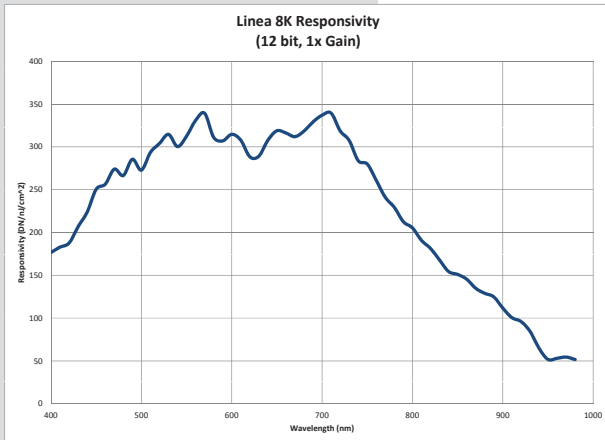
Resolution	8192 pixels
Line Rate	13 kHz (up to 45 kHz with TurboDrive)
Pixel Size	$7.04 \mu\text{m} \times 7.04 \mu\text{m}$
Data Format	8 or 12 bit selectable
Output	Gigabit Ethernet
Lens Mount	M72 x 0.75, F-mount adapters available
Responsivity	340 DN / (nJ / cm ²) in 12 bit at 1x gain
Dynamic Range	> 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 Sopera LT or 3rd party GenICam™ compliant SDK

Models			
Part Number	Resolution	Maximum Line Rates*	Pixel Size
LA-GM-08K08A-00-R	8192	13 kHz, standard	$7.04 \mu\text{m} \times 7.04 \mu\text{m}$

*Up to 45 kHz with TurboDrive and Sopera LT GigE Vision driver.

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