

# 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  $7\ \mu\text{m} \times 7\ \mu\text{m}$  pixel array at an 80 kHz 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, 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 Sopera™ camera configuration utility Camexpert, or an ASCII interface using three letter commands.

### Key Features

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

### 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
- 4 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

### Specifications

Resolution	2048 or 4096 pixels
Line Rate	Up to 80 kHz
Pixel Size	$7.04\ \mu\text{m} \times 7.04\ \mu\text{m}$
Data Format	8 or 12 bit selectable
Output	Base, Medium, and Full Camera Link
Lens Mount	M42 x 1 C-mount adapter available
Responsivity	320 DN / (nJ / cm <sup>2</sup> ) in 12 bit at 1x gain
Dynamic Range	> 60 dB
Nominal Gain Range	1x to 10x
Size	62 mm x 62 mm x 30.9 mm
Mass	< 190 g
Operating Temp	0 °C to 65 °C (front plate)
Power	Hirose 6-pin or PoCL
Power Dissipation	< 4.5 W
Control & Data	SDR-26 mini Camera Link

Models			
Part Number	Resolution	Maximum Line Rates	Pixel Size
LA-CM-02K08A-00-R	2048	80 kHz	$7.04\ \mu\text{m} \times 7.04\ \mu\text{m}$
LA-CM-04K08A-00-R	4096	80 kHz	$7.04\ \mu\text{m} \times 7.04\ \mu\text{m}$

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