

# Linea™ 16K Camera Link

Monochrome CMOS Line Scan Cameras



### Key Features

- High speed: up to 50 kHz
- 16,384 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

## 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 a 16k single line 3.5  $\mu\text{m}$  x 3.5  $\mu\text{m}$  pixel array at a 50 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 Sopera™ camera configuration utility CamExpert, or an ASCII interface using three letter commands.

### Specifications

Resolution	16,384 pixels
Line Rate	Up to 50 kHz
Pixel Size	3.5 $\mu\text{m}$ x 3.5 $\mu\text{m}$
Data Format	8 or 12 bit selectable
Output	Base, Medium, and Full Camera Link
Lens Mount	M72 x 0.75, F-mount adapter available
Responsivity	80 DN / (nJ / cm <sup>2</sup> ) in 12 bit @ 1x gain
Dynamic Range	> 60 dB
Nominal Gain Range	1x to 10x
Size	76.0 mm x 76.0 mm x 30.7 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	< 14 W
Control & Data	SDR-26 mini Camera Link

Models			
Part Number	Resolution	Maximum Line Rates	Pixel Size
LA-CM-16K05A-00-R	16,384	50 kHz	3.5 $\mu\text{m}$ x 3.5 $\mu\text{m}$

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