

## PRELIMINARY

### Linea SWIR 1K

SL-GA-01K04A-00-R InGaAs Line Scan Camera



## GigE SWIR Line Scan Camera

Teledyne DALSA's 1024 pixel GigE SWIR line scan camera features a cutting-edge InGaAs sensor in a compact package for a wide variety of machine vision applications.

This high speed, high resolution camera is the first product in DALSA's SWIR family. The uncooled sensor delivers exceptional responsivity that can be further improved through horizontal pixel binning. Alternatively, digital binning gives customers the option to bin to 512 pixel resolution with 25  $\mu\text{m}$  pixels.

The newest member of the Linea family features an advanced InGaAs detector with 12.5  $\mu\text{m}$  pixels in a 1K array that offers a 40 kHz line rate. The small pixels offer high resolution without compromising sensitivity. With high speed, high sensitivity, cycling mode, and programmable I/Os, the versatile Linea SWIR is ideal for applications such as optical sorting, solar panel inspection, and general purpose machine vision.

#### Key Features

- 1024 pixel resolution
- 12.5  $\mu\text{m}$  pixel size
- 950 to 1700 nm spectral band
- 40 kHz line rate
- HDR mode
- Cycling mode
- Programmable I/Os
- Compact form factor
- Configurable full well
- GigE, PoE

#### Typical Applications

- Food sorting
- Industrial sorting
- Recycling
- Solar panel inspection
- General purpose machine vision

#### Specifications

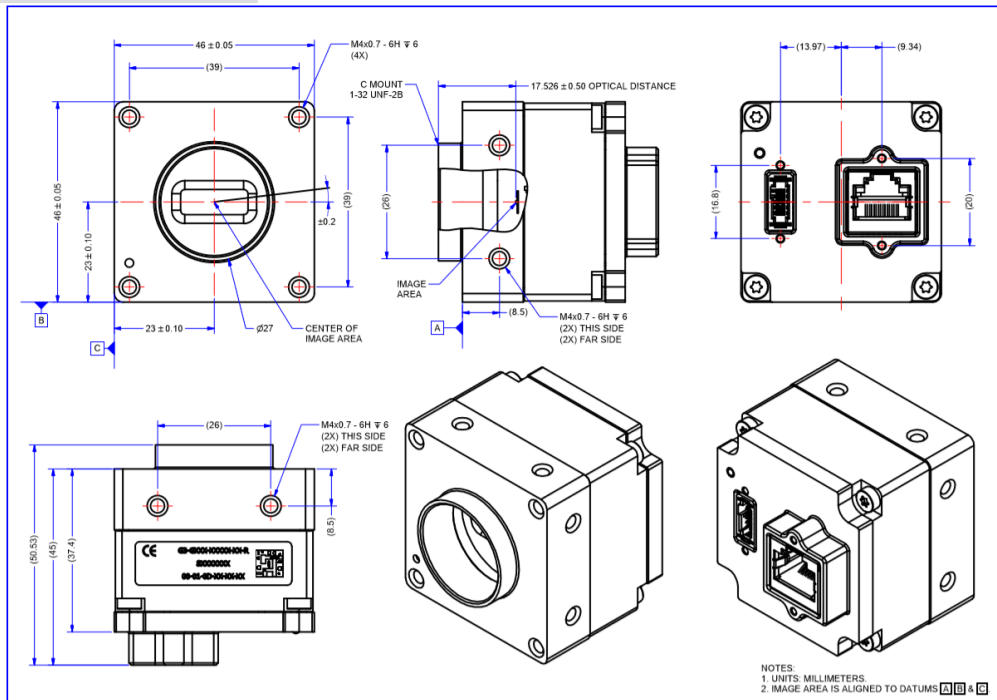
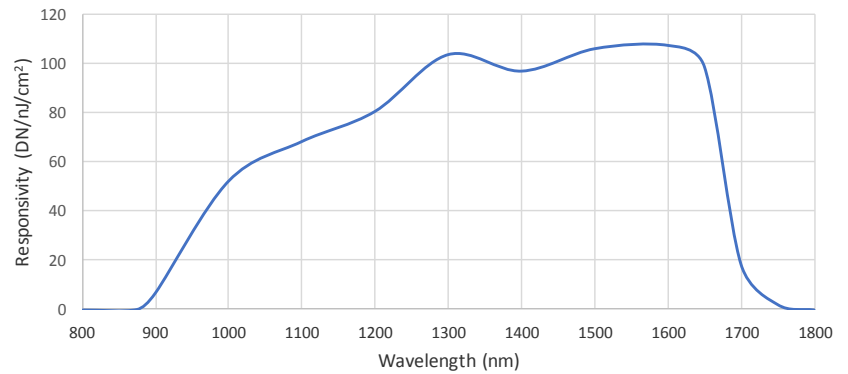
Resolution	1024 pixels
Line Rate	40 kHz
Pixel Size	12.5 $\mu\text{m}$ x 12.5 $\mu\text{m}$
Spectral Band	950 to 1700 nm
Dynamic Range	Up to 74 dB (HDR)
Full Well 1x Gain	10,000 ke-
Full Well 62x Gain	150 ke-
Noise 1x Gain	1,600 e-
Noise 62x Gain	900 e-
Peak Quantum Efficiency	66%
Dark Current	< 5 pA
Output Bit Depth	8, 12 bit mono
Optical Interface	C Mount
Control & Data	GigE Vision
GPIO	2 programmable inputs and outputs
Camera Size	46 x 46 x 51 mm
Camera Weight	<208 g

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### Spectral Response



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