Álava Ingenieros
GRUPO ÁLAVA

Preliminary

Xenics
Infrared Solutions

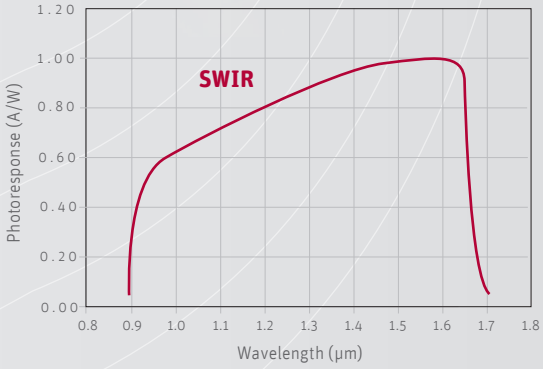
Imagine the invisible

Industrial

Lynx-2048-GigE

High resolution, high speed uncooled SWIR line-scan camera

World's highest resolution SWIR line-scan camera with excellent sensitivity



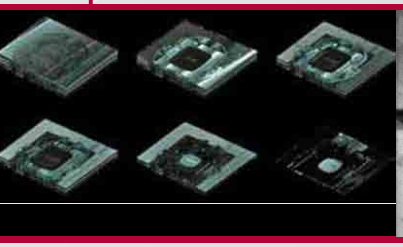
The unique high line resolution achieved by the Lynx-2048-GigE will maximize your production yields. This SWIR solution is perfectly suited for spectroscopy, and for non-destructive and detail-rich imaging from deeper layers of semiconductor materials or measuring the thickness and uniformity of its functional layers.

The Lynx-2048-GigE offers in many ways an affordable solution. The small form factor and smallest pixel pitch of 12.5 µm allows more precision and optimization of compact systems with lower cost lenses. The high line resolution substitutes for costly multiple-camera solutions.

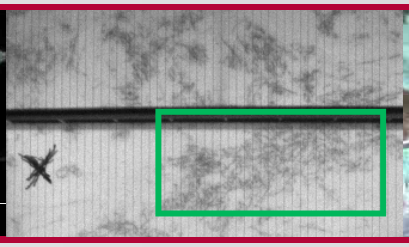
The Lynx-2048-GigE is also a flexible solution with an industry-standard GigE Vision and Power over Ethernet interface. You can also synchronize external events by the trigger input.

You will reach optimal image quality choosing from various configurations in High Sensitivity mode (HS) or High Dynamic Range Mode (HDR) and multiple gain settings.

Designed for use in



OCT: cross-sections MEMS



Semiconductor photoluminescence

Spectroscopy: airborne

Thermal imaging of hot objects

Applications

- Spectroscopy
- Food inspection
- Line scan imaging
- Non-destructive testing
- Semiconductor inspection
- Optical Coherence Tomography (OCT)
- Non-contact thermography of hot objects

Benefits & Features

- Easy to export
- Smallest SWIR line-scan camera
- Superb low dark current imaging
- Full flexibility in integration time settings
- Standard GigE Vision for ease of integration
- Compliant with any software supporting GenICam
- Ultra-high resolution and high sensitivity for low-light conditions

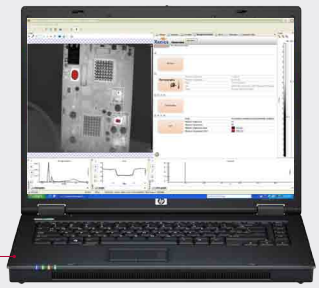
Broad range of accessories available to optimize your system

Lens & filter options

Inputs

Gigabit ethernet

Software



- Xeneth advanced
- Xeneth SDK (opional)

Outputs

Specifications

Array Specifications	Xlin-1.7-2048
Array type	InGaAs
# Outputs	2
Spectral band	0.9 to 1.7 µm
# Pixels	2048 x 1
Pixel pitch	12.5 µm
Pixel height	12.5 µm
InGaAs array length	25.6 mm
Thermo-electric cooler	Uncooled
Pixel operability	> 98 %
Camera Specifications	**Lynx-2048-GigE**
Lens	
Focal length	Broad selection of lenses available
Optical interface	C-mount with adjustable back focus Mounts easily to spectrometers Otional: U-Mount with adjustable back focus Optional: Filter holder
Imaging performance	
Line rate	Max 10 kHz
Pixel rate	25 MPixels/sec
Integration time	Full flexibility in settings from 1 µs to several minutes
A to D conversion resolution	14 bit
CDS	Correlated Double Sampling
Gain settings	Various Settings from 5 fF (HS) till 830 fF (HDR mode)
Pixel Well Depth (e-)	Various Settings from 60 Ke- (HS) till 10 Me- (HDR)
Gain (e-/ADU count) in 16 bit	Various Settings from 3.6 e-/cnt (HS) till 150 e-/cnt (HDR)
Dynamic Range	Various Settings from 76:1 (HS) till 2400:1 (HDR)
Onboard image processing	Configurable single NUC User adjustable offset and gain control
Interfaces	
Digital Output	14 bit GigE
Camera control	Gigabit Ethernet: GigE Vision or Xeneth API/SDK
Image acquisition	Integrate while read / integrate then read snapshot acquisition
Trigger	Trigger in and out; LVCMOS Modes: free running or user selectable frame size per trigger
External Trigger jitter	40 ns
Operating mode	Stand-alone or PC-controlled
Power requirements	
Power consumption	+/- 4 W
Power supply	12 V
Physical characteristics	
Ambient operating temperature	-40°C to 70°C
Dimensions	49 W x 49 H x 62 L mm
Weight camera head	< 150 g (lens not included)

Product selector guide

Part number	# Pixels	Pixel size (µm²)	Line rate (kHz)
XEN-000311	2048 x 1	12.5 x 12.5	10

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Xenics
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ISO 9001:2008 certified