Lynx SQ Series

Linescan SWIR Camera with Square Pixels

- Linescan SWIR Camera with 512, 1024, 2048 resolution
- In-house developed InGaAs sensor

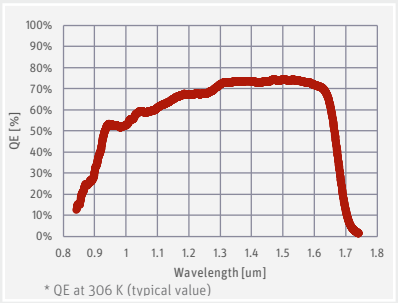
Small, uncooled InGaAs linescan camera with square pixels

The Lynx square (SQ) series, based on an in-house developed linear InGaAs detector, offer affordable short-wave infrared (SWIR) linescan imagers.

The Lynx SQ cameras are able to image line rates up to 40 kHz, for demanding machine vision applications.

The camera comes with an industry-standard CameraLink or GigE Vision interface.

Depending on your imaging requirements, three resolutions of 512, 1024, or 2048 pixels are offered.



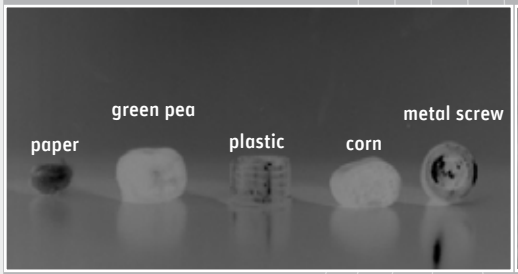
* QE at 306 K (typical value)

Designed for use in

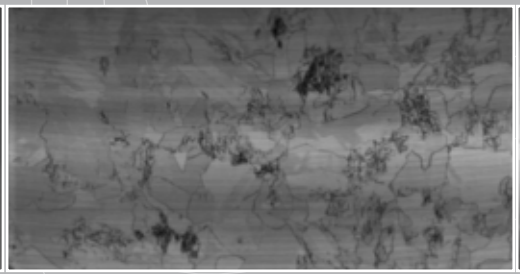
- Medical
- Process Monitoring

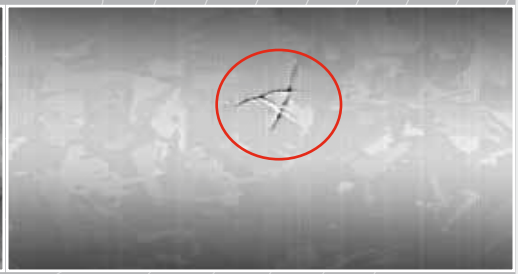
Advantages

- High speed linescan imaging up to 40 kHz
- High resolution
- CameraLink or GigE Vision interfacing



Food sorting


Photoluminescence (solar wafer)


Crack inspection (solar wafer)

▶ Camera Specifications

Camera Specifications	Lynx 512 SQ CL Lynx 512 SQ GigE	Lynx 1024 SQ CL Lynx 1024 SQ GigE	Lynx 2048 SQ CL Lynx 2048 SQ GigE
Mechanical specifications			
Approximate dimensions - excluding lens [width x height x length] [mm]	49 x 49 x 53 [CL], 49 x 49 x 71 [GigE]		
Weight [gr] - excluding lens	153 [CL], 208 [GigE]		
Optical interface	C-mount or M42 [M42 to F-mount adapter optional]		
Connector GigE	RJ-45		
Connector CameraLink	Standard SDR		
Connector power	Hirose HR10-7R-SA[73]		
Connector trigger	SMA		
Environmental & power specifications			
Ambient operating temperature range [°C]	From -40 to +70		
Storage temperature [°C]	From -50 to +85		
Power consumption [W]	2.6 [CL], 4.6 [GigE]		
Power supply voltage	DC 12 V		
Shock	IEC60068-2-27 Ed4.0; half-sine; terminal saw tooth; 50 g [11 ms]		
Vibration	Random: IEC60068-2-64 Ed2.0; 4.3 g [20 - 1000 Hz]. Sine: IEC60068-2-6 Ed7.0; 1 g [10 - 2000 Hz]		
IP rating	IP40		
Regulatory compliance	CE, RoHS		
Electro-optical specifications			
Sensor format [pixels]	512	1024	2048
Pixel pitch [µm]	25	12.5	12.5
Pixel height [µm]	25	12.5	12.5
Detector type	InGaAs photodiode array with CTIA ROIC		
Integration type	Snapshot - global shutter		
Spectral range [nm]	900 - 1700		
Quantum efficiency	~80% [typical peak value]		
Full well capacities [electrons]	450k to 32M	450k to 32M	450k to 10M
Read out modes	ITR and IWR		
Pixel operability	>99.6%	>99%	>98%
Max line rate [kHz]	40	40	10
Analog-to-Digital [ADC] [bits]	14		
Command and control	CameraLink or GigE Vision		
Digital output format	CameraLink or GigE Vision [16 bit]		
Trigger	In or out via SMA [configurable]. For CL - additional trigger in available via CC1		
Product selector guide			
Part number	XEN-000633 [CL]	XEN-000313 [CL]	XEN-000314 [CL]
	XEN-000309 [GigE]	XEN-000310 [GigE]	XEN-000311 [GigE]