LYNX R SERIES

Line-scan SWIR Camera with Rectangular Pixels

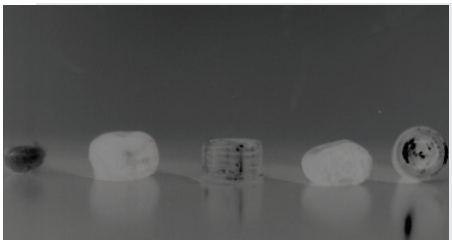
- Line-scan SWIR Camera with 1024 pixel resolution
- In-house developed InGaAs sensor

SMALL, UNCOOLED InGaAs LINE-SCAN CAMERA WITH RECTANGULAR PIXELS

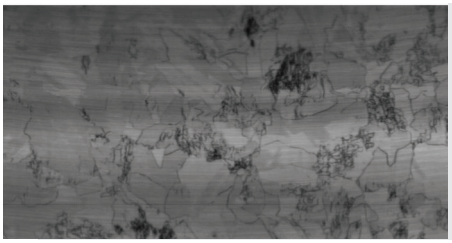
The Lynx R series, based on an in-house developed linear InGaAs detector, is a high-performance short-wave infrared (SWIR) camera providing high speed and quality line-scan imaging

The Lynx R cameras are able to image line rates up to 40 kHz, for demanding spectroscopy applications.

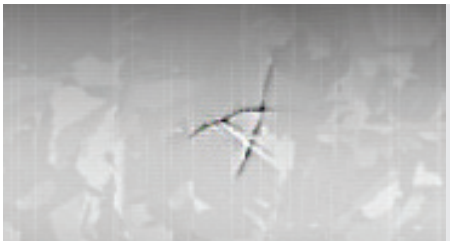
The camera comes with an industry standard CameraLink or GigE Vision interface.



Food Sorting



Photoluminescence (solar wafer)



Crack Inspection (solar wafer)

DESIGNED FOR USE IN

- Spectroscopy
- Spectral-domain optical coherence tomography

ADVANTAGES

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

SPECIFICATIONS

Camera Specifications	Lynx 1024 R CL	Lynx 1024 R GigE
Mechanical specifications		
Camera dimensions (width x height x length) [mm] (approx.)	49 x 49 x 53 [CL], 49 x 49 x 71 [GigE]	
Optical interface	C-mount or M42 [M42 to F-mount adapter optional]	
Camera weight [gr]	153 [CL], 208 [GigE]	
Connector GigE	NA	RJ45
Connector CameraLink	Standard SDR	NA
Connector Power	Hirose HR10-7R-SA [73]	
Connector trigger	SMA	
Environmental & power specifications		
Ambient temperature range [°C]	from -40 to +70	
Storage temperature [°C]	From -50 to +85	
Power consumption [W]	3.9 (CL); 6.3 (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]	1024	
Pixel pitch [µm]	12.5	
Pixel height [µm]	250	
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]	from 450k to 32M	
Read out modes	ITR/IWR	
Pixel operability	>99%	
Max line rate [kHz]	40	
Analog-to-Digital [ADC] [bits]	14	
Command and control	CameraLink Base	GigE Vision
Digital output format	16 bit base CameraLink or GigE Vision	
Trigger	In or out via SMA (configurable) - for CL: additional trigger in available via CC1	
Product selector guide		
Part number	XEN-000431	XEN-000432