

# Xeva eSWIR Series

## Areascan eSWIR Camera

• eSWIR cooled camera with 320 x 256 resolution

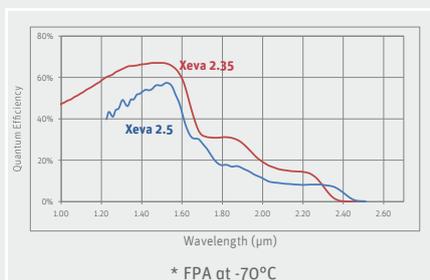


### Compact T2SL based eSWIR camera

The Xeva eSWIR (extended short-wave infrared) series uses a thermo-electrically cooled T2SL detector with a 320 x 256 pixel resolution and response in the short-wave infrared (SWIR) band up to 2.5  $\mu\text{m}$ .

The Xeva eSWIR cameras are offered with frame rates of more than 340 Hz.

The camera comes with a CameraLink interface.

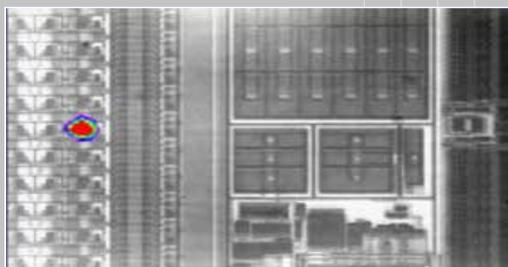


### Designed for use in

- Machine Vision
- Safety & Security
- Scientific & Advanced research
- Medical

### Advantages

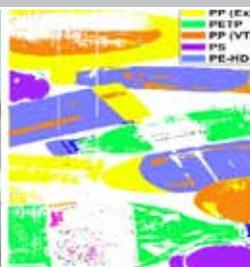
- Extended SWIR imaging up to 2.5 $\mu\text{m}$
- Thermo-electrically cooled
- CameraLink interface
- Versatility with gain modes



• Semiconductor inspection



• Recycling



• Food sorting

## ► Camera Specifications

Camera Specifications	Xeva 2.35 320 100 Xeva 2.35 320 350	Xeva 2.5 320 100 Xeva 2.5 320 350
<b>Mechanical specifications</b>		
Approximate Dimensions - excluding lens [width x height x length] [mm]	88 X 111 X 109	
Weight [gr] - excluding lens	1300	
Camera cooling	Forced convection [fan]	
Optical interface	C-mount or M42	
Connector USB	Mini-USB	
Connector CameraLink	Standard MDR	
Connector power	LEMO EXP	
Connector trigger	5-pin TRIAD 01	
<b>Environmental &amp; power specifications</b>		
Ambient operating temperature range [°C]	From 0 to +50	
Storage temperature [°C]	From -40 to +80	
Power consumption [W]	Up to 84	
Power supply voltage	DC 24 V	
Regulatory compliance	CE, RoHS	
<b>Electro-optical specifications</b>		
Image format [pixels]	320 x 256	
Pixel pitch [µm]	30	
Detector type	T2SL photodiode array with CTIA ROIC	
Sensor cooling	4 stage TE cooler	
Integration type	Snapshot - global shutter	
Active area and diagonal [mm]	9.6 x 7.68 [diagonal 12.3]	
Optical fill factor	100%	
Spectral range [nm]	1000 to 2350	1000 to 2500
Gain modes	High Gain [HG] and High Dynamic Range [HDR]	
Full well capacities [electrons]	170k [HG] and 3.5M [HDR]	
Read noise [electrons]	150 [HG] and 1000 [HDR]	
Dark current [electrons/second]	<80M [at 200K sensor temperature]	<320M [at 200K sensor temperature]
Read out modes	ITR	
Pixel operability	>99%	
Preconfigured exposure time range [ms]	up to 6 in HDR	up to 1.5 in HDR
Max frame rate [Hz] [full frame]	100 Hz or 344 Hz	
Region of interest	Yes [not for 100 Hz model]	
Min region size [pixels]	128 x 8 [not for 100 Hz model]	
Max frame rate [Hz] [min region size]	>10000 [not for 100 Hz model]	
Analog-to-Digital [ADC] [bits]	14	
Command and control	USB 2.0	
Digital output format	CameraLink [14 bit] [max 100 Hz frame rate with USB 2.0]	
Trigger	In or out via trigger connector [Configurable] - only recommended with CameraLink data interface	
<b>Product selector guide</b>		
Part number	XEN-000538 [100] XEN-000539 [350]	XEN-000617 [100] XEN-000618 [350]

XDS-017-01 | Information furnished by Xenics is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are typical values and subject to change without notice. This information supersedes all previously supplied information.



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