

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 2.35 µm.

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 & Securit
- Scientific & Advanced research
- Medical

Advantages

- Extended SWIR imaging up to 2.35µm
- Thermo-electrically cooled
- CameraLink interface
- Versatility with gain modes



Semiconductor inspection

■ Recycling

Food sorting

Camera Specifications

 Camera Specifications 	
Camera Specifications	Xeva 2.35 320 100 Xeva 2.35 320 350
Mechanical specifications	
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
Environmental & power specifications	
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
Electro-optical specifications	
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
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]
Read out modes	ITR
Pixel operability	>99%
Preconfigured exposure time range [ms]	up to 6 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
Product selector guide	
Part number	XEN-000538 [100]
	XEN-000539 [350]



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