

Imagine the invisible

Scientific



Xeva-2.5-320

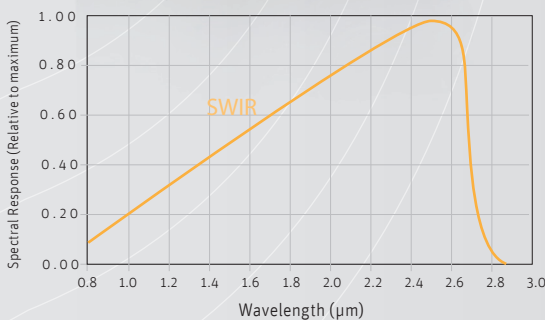
Flexible SWIR imaging camera up till 2.5 μm

Superior performance for reliable research

The Xeva-2.5-320 unit is a compact digital camera, operating a HgCdTe detector array (up to 2.5 μm) with 320 x 256 pixel resolution. It outputs 14 bit data and comes in a 60 Hz, 100 Hz or 200 Hz version.

The camera interfaces to a PC via standard USB 2.0 or CameraLink and comes with a custom frame grabber card or can interface to standard frame grabber cards such as the NI-1428.

Each camera is delivered with a graphical user interface Xeneth, which offers direct access to various camera settings such as exposure time and operating temperature. Through its advanced thermo-mechanical design, the Xeva-2.5-320 achieves excellent performance levels using a TE4-cooled device operating down to 200K or below.



Designed for use in



⌘ Spectral signature PVC

⌘ Semiconductor inspection

⌘ Art inspection

Applications

- Art inspection
- R&D (SWIR range)
- Hyperspectral imaging
- Semiconductor inspection
- Thermal imaging of hot objects (in the 200°C to 800°C range)
- Laser beam profiling

Benefits & Features

- Spectrometer compatible
- Smallest TE4-cooled camera
- High Speed SWIR imaging up to 2.5 μm
- Scientific image recording and analysis
- Flexible programming in an open architecture
- CameraLink and triggering for high speed imaging

Broad range of accessories available to simplify your research

▸ Lens & filter options



▸ Inputs



▸ Software



▸ Outputs

- Xeneth advanced
- Xeneth SDK
- Xeneth radiometric (optional)

▸ Specifications

Array specifications	Xeva-2.5-320
Array Type	HgCdTe
Spectral band	0.85 μm to 2.5 μm
# Pixels	320 x 256
Pixel Pitch	30 μm
Array Cooling	TE4
Pixel operability	> 99%

▸ Product selector guide

Part number	Interface	Cooling	Frame Rate	ADC
XC403-060Hz	CameraLink	TE4	60 Hz	14 bit
XC403-100Hz	CameraLink	TE4	100 Hz	14 bit
XC403-200Hz	CameraLink	TE4	200 Hz	14 bit

Camera specifications	60 Hz	100 Hz	200 Hz
Lens (included)			
Focal length	16mm f/1.4		
Optical interface	C-Mount, spectrograph fixation holes (Broad selection of lenses are available)		
Imaging performance			
Frame rate: Video rate	60 Hz	100 Hz	200 Hz
Integration type	Snapshot		
Exposure time range	100 μsec up to 20 msec		
Noise level	9.3 AD counts		
S/N ratio	64 dB		
A to D conversion resolution	14 bit		
Interfaces			
Camera control	USB 2.0		
Image acquisition	CameraLink		
Trigger	TTL levels		
Graphical User Interface (GUI)	Xeneth Advanced		
Power requirements			
Power consumption	< 4 Watt, cooler: 30 Watt max		
Input voltage	12 V – 5 A		
Physical characteristics			
Camera cooling	Forced convection cooling		
Cool-down time	< 300 sec		
Ambient operating temperature	0 to 50 $^{\circ}\text{C}$		
Dimensions	90 W x 110 H x 110 L mm ³		
Weight camera head	App. 1.8 kg		
Weight power supply	300 g		