

Imagine the invisible

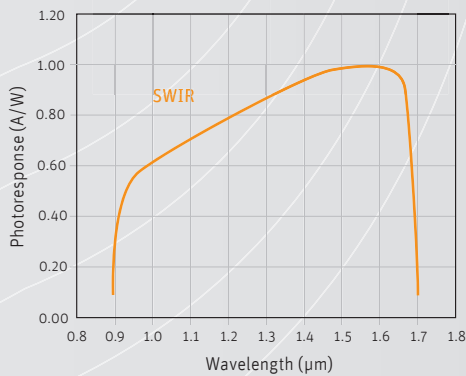
Scientific



Xeva-1.7-640

Advanced research
in SWIR imaging

High-resolution and cooled Xeva-1.7-640 for excellent image quality research



In one compact housing, the Xeva-1.7-640 digital camera combines a thermo-electrically cooled InGaAs detector head and the control and communication electronics.

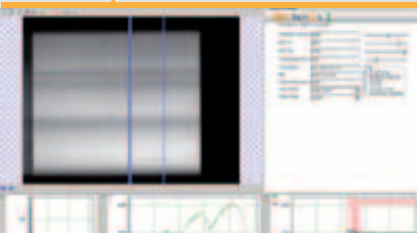
The Xeva-1.7-640 unit is available with standard (up to 1,7 µm) InGaAs detector arrays and comes in various speed versions: 25 Hz and 90 Hz. It allows you to choose the most suitable detector camera configuration for your specific application. The camera head

interfaces to a PC via standard USB 2.0 and CameraLink.

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.

The camera outputs 14 bit data. The software tools include two point uniformity correction and bad pixel replacement.

Designed for use in



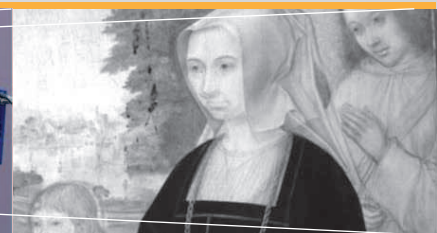
⌘ R&D SWIR



⌘ Food inspection



⌘ Art inspection



Applications

- Art inspection
- R&D (SWIR range)
- Hyperspectral imaging
- Semiconductor inspection
- Thermal imaging of hot objects (in the 300°C to 1200°C range)

Benefits & Features

- High dynamic range
- Stand alone operation
- High definition images
- Performance optimization
- TrueNUC image correction
- Thermal imaging of hot objects
- Flexible programming in an open architecture

Broad range of accessories available to simplify your research



Specifications

Array specifications	Xeva-1.7-640
Array Type	InGaAs
Spectral band	Standard: 0.9 to 1.7 μm
# Pixels	640 x 512
Pixel Pitch	20 μm
Array Cooling	TE1-cooled down to 263K
Pixel operability	> 99%

Product selector guide

Part number	Interface	Cooling	Frame Rate (Hz)
XEN-000111	CameraLink	TE1	25
XEN-000112		TE1	90
XEN-000113		TE3	25
XEN-000114		TE3	90

Camera specifications	25 Hz	90 Hz
Lens (included)		
Focal length	25mm f/2.1 for 25.6 mm	
Optical interface	C-Mount, spectrograph fixation holes (Broad selection of lenses are available)	
Imaging performance		
Frame rate	25 Hz	90 Hz
Integration type	Snapshot	
Exposure time range	1 μs up to 100 seconds	
Noise level: Low gain	7 AD counts	
High gain	14 AD counts	
S/N ratio: Low gain	67 dB	
High gain	61 dB	
A to D conversion resolution	14 bit	
Interfaces		
Camera control	USB 2.0	
Image acquisition	USB 2.0 / CameraLink	
Trigger	TTL levels	
Graphical User Interface (GUI)	Xeneth Advanced	
Power requirements		
Power consumption	< 4 Watt, cooler: 30 Watt max	
Input voltage	12 V	
Physical characteristics		
Camera cooling	Forced convection cooling	
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	