

Imagine the invisible

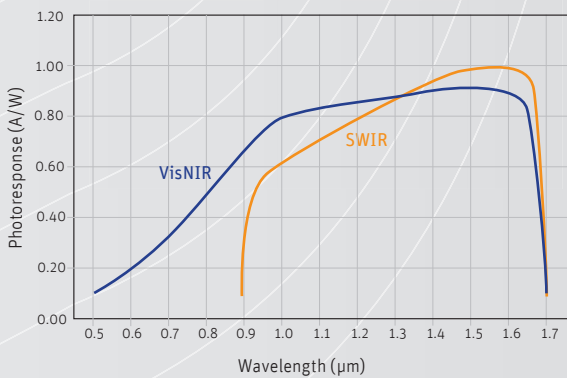
Scientific



XS-1.7-320

Flexibility for easy research
in SWIR imaging

Ultra-compact and plug-and-play XS-1.7-320 simplifies the way you work



In a very compact housing, the XS-1.7-320 digital infrared camera combines an uncooled InGaAs detector head and the control and communication electronics.

The XS-1.7-320 unit is available with standard InGaAs detector arrays working up to 1.7 µm and comes in a 60 Hz and 100 Hz speed version. It allows you to choose the most suitable detector camera configuration for your specific research application.

The camera head interfaces to a PC via standard USB 2.0. Each camera is delivered with a graphical user interface, which offers direct access to various camera settings such as exposure time and gain setting. 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 imaging

⌘ Laser beam profiling

⌘ Counterfeit money inspection

Applications

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

Benefits & Features

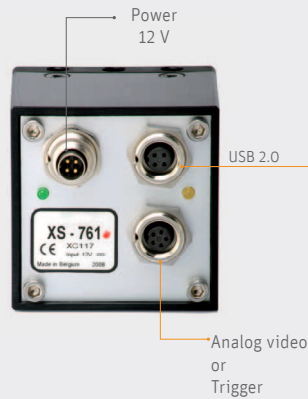
- USB 2.0 interface
- Stand alone operation
- Performance optimization
- TrueNUC image correction
- Triggering for synchronised operation
- Extending SWIR imaging to the visible
- High image quality with compact camera
- Flexible programming in an open architecture

Broad range of accessories available to simplify your research

▶ Lens & filter options



▶ Inputs



▶ Outputs

▶ Software



- Xeneth Advanced (XS Trigger)
- Xeneth SDK (XS Trigger)
- X-Control Extended (XS Analog)
- X-Control SDK (XS Analog)

Specifications

Array specifications	XS-1.7-320
Array Type	InGaAs
Spectral band	Standard 0.9 μm to 1.7 μm ; Optional 0.4 μm to 1.7 μm
# Pixels	320 x 256
Pixel Pitch	30 μm
Array Cooling	Uncooled
Pixel operability	> 99%

Camera specifications	XS Base	XS Analog	XS Trigger
Lens (included)			
Focal length	Visible lens 16mm f/1.4		
Optical interface	C-Mount (Broad selection of lenses are available)		
Imaging performance			
Frame rate:	60 Hz	60 Hz	100 Hz
Integration type	Snapshot		
Exposure time range	1 μsec up to 20 msec (Low gain)		
Noise level: Low gain	4 AD counts		
High gain	15 AD counts		
S/N ratio: Low gain	69 dB		
High gain	60 dB		
A to D conversion resolution	14 bit		
Interfaces			
Camera control	USB 2.0		
Image acquisition	USB 2.0		
Trigger	-	-	TTL levels
Graphical User Interface (GUI)	Xeneth Advanced (XS Trigger) X-Control Extended (XS Analog)		
Power requirements			
Power consumption	< 4 Watt		
Input voltage	12 V		
Physical characteristics			
Camera cooling	Uncooled		
Ambient operating temperature	0 to 50 °C		
Dimensions	50 W x 50 H x 50 L mm ³		
Weight camera head	225 g		
Weight power supply	300 g		

Product selector guide

Part number	Digital output Interface	Analog	Trigger	VisNIR Option
XEN-000122	USB 2.0	-	-	No
XEN-000115		PAL	-	
XEN-000123		NTSC	-	
XEN-000127		-	Yes	
XEN-000151		PAL	-	Yes
XEN-000150		NTSC	-	
XEN-000149		-	Yes	