

Imagine the invisible

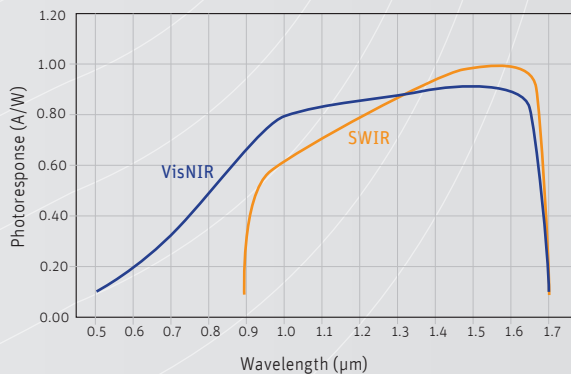
Scientific



XS-1.7-320

Flexibility
for easy research

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 X-Control, 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

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



▸ Software



- X-Control
- X- Control SDK

▸ Outputs

▸ 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	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)	X-control Advanced		
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	USB 2.0	PAL	-	No
XEN-000123	USB 2.0	NTSC	-	No
XEN-000127	USB 2.0	-	Yes	No
XEN-000151	USB 2.0	PAL	-	Yes
XEN-000150	USB 2.0	NTSC	-	Yes
XEN-000149	USB 2.0	-	Yes	Yes