

Imagine the invisible

Scientific



# Bobcat-1.7-320

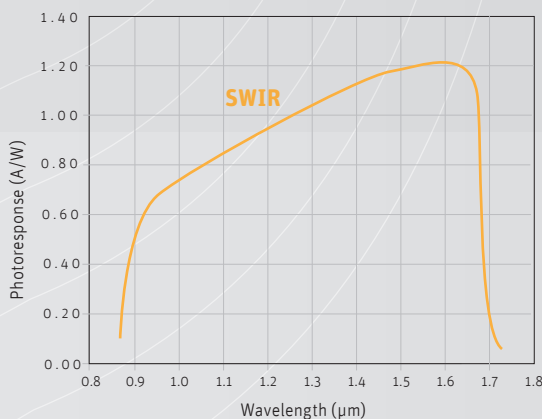
Uncooled smart InGaAs camera

## Smart and sharp SWIR imaging for brilliant image quality research

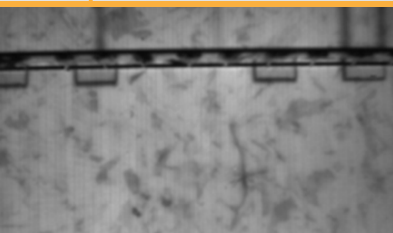
With superior image quality the Bobcat-1.7-320 is available as a complete digital infrared camera system with an embedded Digital Signal Processor (DSP) for advanced real-time image processing, reducing the overall cost.

With the Bobcat-1.7-320 SWIR camera you can look through glass, so standard available C-Mount lenses and protective camera housings can be used. Again making this camera affordable for a wide variety of scientific applications.

In addition the Bobcat-1.7-320 comes with an analog and digital interface. The camera interfaces to a PC via standard Ethernet or CameraLink connection.



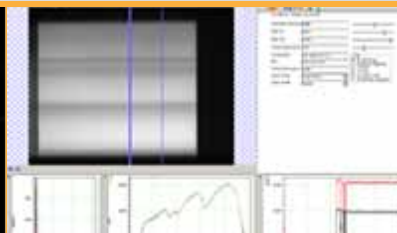
### Designed for use in



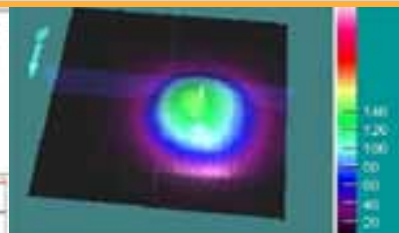
⌘ Solar cell inspection



⌘ Stress analysis



⌘ R&D SWIR



⌘ Laser beam profiling

### Applications

- R&D (SWIR) range
- Solar cell inspection
- Laser beam profiling
- Hyperspectral imaging
- Thermal imaging of hot objects (300°C to 800°C range)

### Benefits & Features

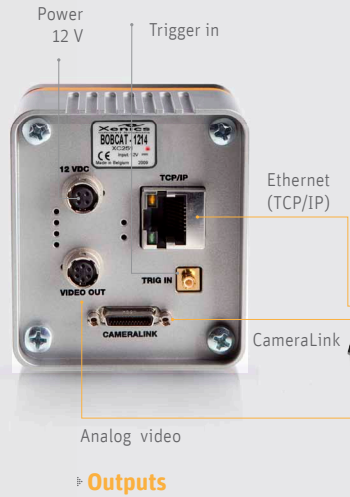
- Flexible and easy-to-use
- Ethernet standard interfaces
- Stand-alone operation (analog out)
- High sensitivity and excellent image quality
- Flexible programming in an open architecture

# Broad range of accessories available to simplify your inspection

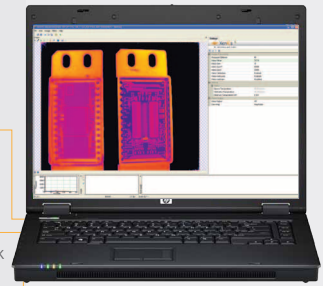
## ▶ Lens & filter options



## ▶ Inputs



## ▶ Software



- Xeneth basic
- Xeneth advanced
- Xeneth SDK

## ▶ Outputs

## Specifications

Array specifications	Bobcat-1.7-320
Array Type	InGaAs
Spectral band	0.9 $\mu\text{m}$ to 1.7 $\mu\text{m}$
# Pixels	320 x 256
Pixel Pitch	20 $\mu\text{m}$
Array Cooling	Uncooled
Gain setting	High gain: 10 fF Low gain: 90 fF
Pixel operability	> 99%
Camera Specifications	Bobcat-1.7-320
Lens (included)	
Focal length	16 mm f/1.4
Optical interface	C-mount (Broad selection of lenses available)
Imaging performance	
Frame rate	60 Hz in 8 bit mode 30 Hz in 16 bit mode
Window of interest	Minimum size 4 x 1
Integration type	Snapshot
Exposure time range	7 $\mu\text{s}$ - 70 ms (low gain)
S/N ratio	High gain: 60 dB Low gain: 66 dB
A to D conversion resolution	14 bit
Interfaces	
Camera control	Ethernet (TCP/IP): Xeneth API/SDK CameraLink: XSP (Xeneth Serial Protocol)
Digital output	Ethernet (TCP/IP): 16 bit or 8 bit CameraLink: 16 bit base
Trigger	Trigger in; LVCMOS
Power requirements	
Power consumption	< 4.5 W at room temperature
Power supply	12 V
Physical characteristics	
Ambient operating temperature	0°C to 50°C
Dimensions	62 W x 72 H x 58 L mm <sup>3</sup>
Weight camera head	380 g (lens not included)

## Product selector guide

Part number	Digital	Frame rate	Analog
XEN-000166	Yes	60	PAL
XEN-000264	Yes	60	NTSC

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