

Imagine the invisible

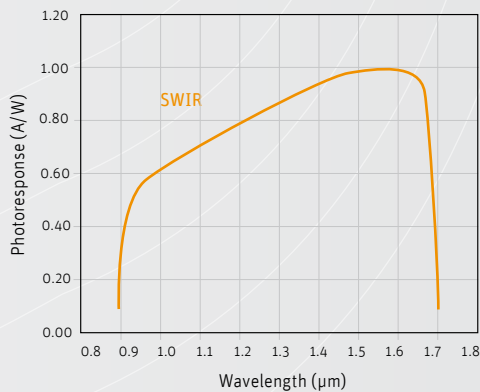
Research & Development



Bobcat-320-Gated

Cooled smart InGaAs camera

Extremely short 100 nsec integration time for SWIR gated imaging



The Bobcat-320-Gated SWIR camera operates in the 0.9 to 1.7 µm spectral band. It provides extremely short integration times down to 100 ns. Bobcat-320-Gated makes use of a highly sensitive uncooled InGaAs detector, which is available in a 20 µm pixel pitch. The compact camera contains real-time on-board image processing and image correction - all at a very favorable price point.

A special feature of the Bobcat-320-Gated is the programmable trigger-out delay between the internally generated trigger-out pulse and the start of integration. It is configurable from 100 ns up to 1 ms in steps of 100 ns, or 1 ms to 40 ms (standard mode). With all these features, Bobcat-320-Gated is ideally suited for the inspection of light bulbs and hot or fast moving objects.

Designed for use in



Light bulb inspection

Turbine blades inspection

R&D SWIR

Laser beam profiling

Applications

- R&D (SWIR) with short integration times
- Laser gated imaging
- Imaging of hot or moving objects such as light bulb or turbine blades inspection
- Measurement systems needing synchronisation of the camera with a pulsed laser

Benefits & Features

- Extreme short 100 nsec integration time
- Programmable trigger out
- Flexible programming in an open architecture
- CameraLink or Ethernet standard interfaces
- High sensitivity and excellent image quality

Broad range of accessories available to simplify your inspection

▶ Lens & filter options

Various focal lengths available



▶ Discover our Lens Selector Guide
www.xenics.com/LSG



▶ Inputs & Outputs



▶ Software



- Xeneth basic
- Xeneth advanced (standard)
- Xeneth SDK (optional)
- Xeneth LabVIEW SDK (optional)

▣ Specifications

Camera specifications	Bobcat-320-Gated
Lens	
Focal length	Broad selection of lenses available
Optical interface	C-mount
Imaging performance	
Frame rate	400 Hz in 14 bit mode
Window of interest	Minimum size 32 x 4
Exposure time range	0.1 μ s to 40 ms
Dynamic Range	61 dB
A to D conversion resolution	14 bit
On-board image processing	Auto-Gain and Offset Auto-exposure (400 Hz with CL interface)
Interfaces	
Camera control	GigE Vision CameraLink
Digital output	GigE Vision: 14 bit CameraLink: 14 bit
Trigger	Trigger in / out (configurable)
Power requirements	
Power consumption	2.8 W (for Bobcat-CameraLink) (without TEC) 4 W (for Bobcat-GigE) (withouth TEC)
Power supply	12 V
Physical characteristics	
Operating case temperature range	-40 °C to +70 °C
Dimensions	55 W x 55 H x 72 L mm (for Bobcat-CameraLink) 55 W x 55 H x 81,7 L mm (for Bobcat-GigE)
Weight camera head	285 g (for Bobcat-CameraLink) (lens not included) 334 g (for Bobcat-GigE) (lens not included)

Array specifications	Bobcat-320-Gated
Array type	InGaAs
Spectral band	0.9 μ m to 1.7 μ m
# resolution	320 x 256
Pixel pitch	20 μ m
Array cooling	TE cooled
Full Well Capacity	125 k e ⁻
Pixel operability	> 99 %

▣ Product selector guide

Part number	Camera output	Frame rate
XEN-000525	GigE	400 Hz (Gated)
XEN-000585	CL	400 Hz (Gated)