

## **BOBCAT 320 TEO & WL SERIES**

Low cost area-scan SWIR Camera

- SWIR uncooled camera with 320 x 256 resolution
- In-house developed InGaAs sensor
- Windowless sensor optional (WL)



# SMALL, LOW COST, UNCOOLED InGaAs CAMERA

The Bobcat 320 TEO and WL series are based on an in-house developed, uncooled InGaAs detector with a 320 x 256 pixel resolution.

The Bobcat 320 TEO and WL cameras are offered with GigE Vision interface, 400 Hz maximum frame rate and feature low weight and power.

The Bobcat 320 WL comes with a windowless uncooled detector, specifically targeting laser beam analysis and laser wavefront sensing applications.

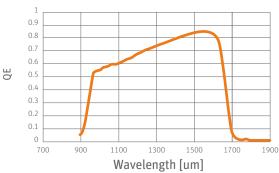
### **DESIGNED FOR USE IN**

- Machine Vision
- Scientific & Advanced research
- Process Monitoring

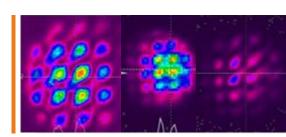
### **ADVANTAGES**

- Flexible and easy-to-use
- Low cost
- High speed 400 Hz
- Windowless version optional (WL)

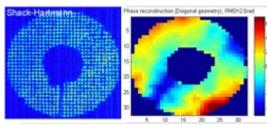
### Quantum Efficiency (QE)



\* QE at 306 K sensor temperature



Laser Beam Analysis



**Wavefront Sensing** 

# XDS.020.0.0.1 Information furnished by Xenics is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are typical values and subject to change without notice. This information supersedes all previously supplied information.

### **SPECIFICATIONS**

Camera Specifications	Bobcat 320 TEO GigE 400	Bobcat 320 WL GigE 400
Mechanical specifications		
Approximate dimensions - excluding lens width x height x length] [mm]	55 x 55 x 74	
Weight [gr] - excluding lens	280	
Optical interface	C-mount or M42	
Connector GigE	RJ-45	
Connector power	Hirose HR10-7R-SA[73]	
Connector trigger	SMA	
Environmental & power specifications		
Operating case temperature [°C]	From -40 to +70	
Storage temperature [°C]	From -45 to +85	
Power consumption [W]	4	
Power supply voltage	DC 12 V	
Shock	IEC60068-2-27 Ed4.0; half-sine; terminal saw tooth; 50 g [11 ms]	
/ibration	Random: IEC60068-2-64 Ed2.0; 4.3 g [20 - 1000 Hz]. Sine: IEC60068-2-6 Ed7.0; 1 g [10 - 2000 Hz]	
P rating	IP40	
Regulatory compliance	CE, RoHS	
ilectro-optical specifications		
mage format [pixels]	320 x 256	
Pixel pitch [µm]	20	
Detector type	InGaAs photodiode array with CTIA ROIC	
ensor temperature stabilization	Uncooled	Uncooled & Windowless detector
ntegration type	Snapshot - global shutter	
Active area and diagonal [mm]	6.4 x 5.12 [diagonal 8.2]	
Optical fill factor	100%	
pectral range [nm]	900 - 1700	
Quantum efficiency	~80% [typical peak value]	
Gain modes	Single gain	
ull well capacities [electrons]	70K	
Read noise [electrons]	110	
Dark current [electrons/second]	<2E6 [for 150 mV reverse bias] typically	
Read out mode	ITR	
Pixel operability	>99.5%	
Preconfigured exposure time range [ms]	0.5 to 4	
Max frame rate [Hz] [full frame]	400	
Region of interest	Yes	
Min region size [pixels]	32 x 4 [step 4 x 1]	
Max frame rate [Hz] [min region size]	>10000	
Analog-to-Digital [ADC] [bits]	14	
Command and control	GigE Vision	
Digital output format	GigE Vision [16 bit]	
rigger	In or out via SMA [Configurable]	
Product selector guide		
art number	XEN-000730	XEN-000731



