

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.

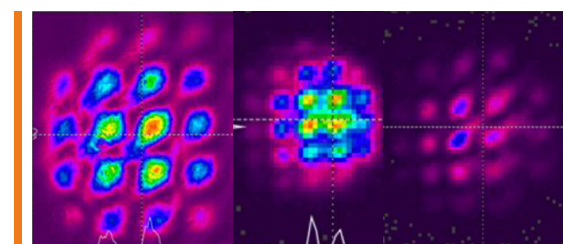
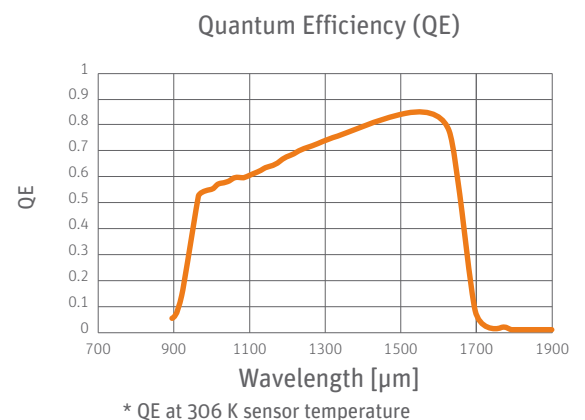
The cameras have standard on-board image correction featuring non-uniformity correction (NUC), bad pixel replacement (BPR) and automatic gain control (AGC). For more info on other image enhancement features, contact our sales department.

DESIGNED FOR USE IN

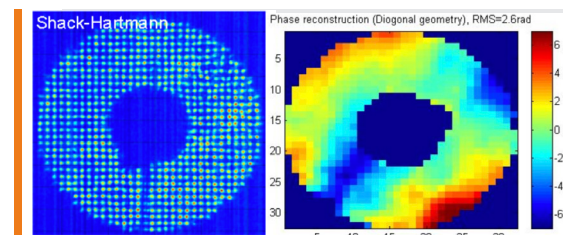
- Machine Vision
- Scientific & Advanced research
- Process Monitoring

ADVANTAGES

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



Laser Beam Analysis



Wavefront Sensing

SPECIFICATIONS

Camera Specifications	Bobcat 320 TE0 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 Also available in temperature range 0 - 50	
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]	
Vibration	Random: IEC60068-2-64 Ed2.0; 4.3 g [20 - 1000 Hz]. Sine: IEC60068-2-6 Ed7.0; 1 g [10 - 2000 Hz]	
IP rating	IP40	
Regulatory compliance	CE, RoHS	
Electro-optical specifications		
Image format [pixels]	320 x 256	
Pixel pitch [µm]	20	
Detector type	InGaAs photodiode array with CTIA ROIC	
Sensor temperature stabilization	Uncooled	Uncooled & Windowless detector
Integration type	Snapshot - global shutter	
Active area and diagonal [mm]	6.4 x 5.12 [diagonal 8.2]	
Optical fill factor	100%	
Spectral range [nm]	900 - 1700	
Quantum efficiency	~80% [typical peak value]	
Gain modes	Single gain	
Full 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]	
Trigger	In or out via SMA [Configurable]	
Product selector guide		
Part number	XEN-000730	XEN-000731

XDS.0291.01 | 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.

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