BLACKFLY® S GigE

Industrial Machine Vision Camera | BFS-PGE-23S6M/C-C

KEY FEATURES

Field Proven Sensor
Harness the power of a field proven sensor with the Sony IMX249 global shutter sensor for scientific imaging and medical applications. Experience its large 5.86 µm pixel size, large full well capacity with superior dynamic range.

Advanced Camera Control
Explore the capabilities of advanced camera control through the sophisticated features offered on the camera. Automate tasks effortlessly with tools like the Sequencer, Logic Blocks, Counters and Timers, enhancing efficiency and precision.

Reduce Data Throughput
Optimize your system's performance effortlessly with our Lossless Compression feature. Reduce data throughput without sacrificing quality, ensuring an efficient workflow.

Lens Shading Correction
Correct the imaging artifact of lens shading with our proprietary lens shading correction feature. It utilizes a calibrated image based on the optics and lighting used in the application, ensuring uniform and flawless visuals without any unwanted shading.

APPLICATIONS

- Food and Beverage
- Lens Inspection
- Microscopy
- Scientific imaging

Small Package, Powerful Results

Introducing the Blackfly S camera from Teledyne FLIR, now equipped with the well-regarded Sony IMX249 sensor, renowned for its exceptional imaging performance even in challenging light conditions, as well as its versatile Near-IR performance under the right lighting conditions. This potent combination delivers unparalleled image quality, empowering you to effortlessly capture precise images tailored to your specific project needs.

The Blackfly S camera is valued for its compact design and superior performance in machine vision technology. One of the standout features of the Blackfly S camera is its Lossless Compression (LLC) capability, which optimizes data transmission without compromising image quality. This approach, coupled with advanced automated and manual controls, provides you with unparalleled flexibility and efficiency in imaging tasks.

Additionally, the Blackfly S camera ensures a smooth transition for system designers upgrading from previous models, offering enhanced functionalities while maintaining compatibility and form factor. This approach enables an easy upgrade, making it the ideal choice for upgrading your imaging capabilities without the hassle of major system adjustments.
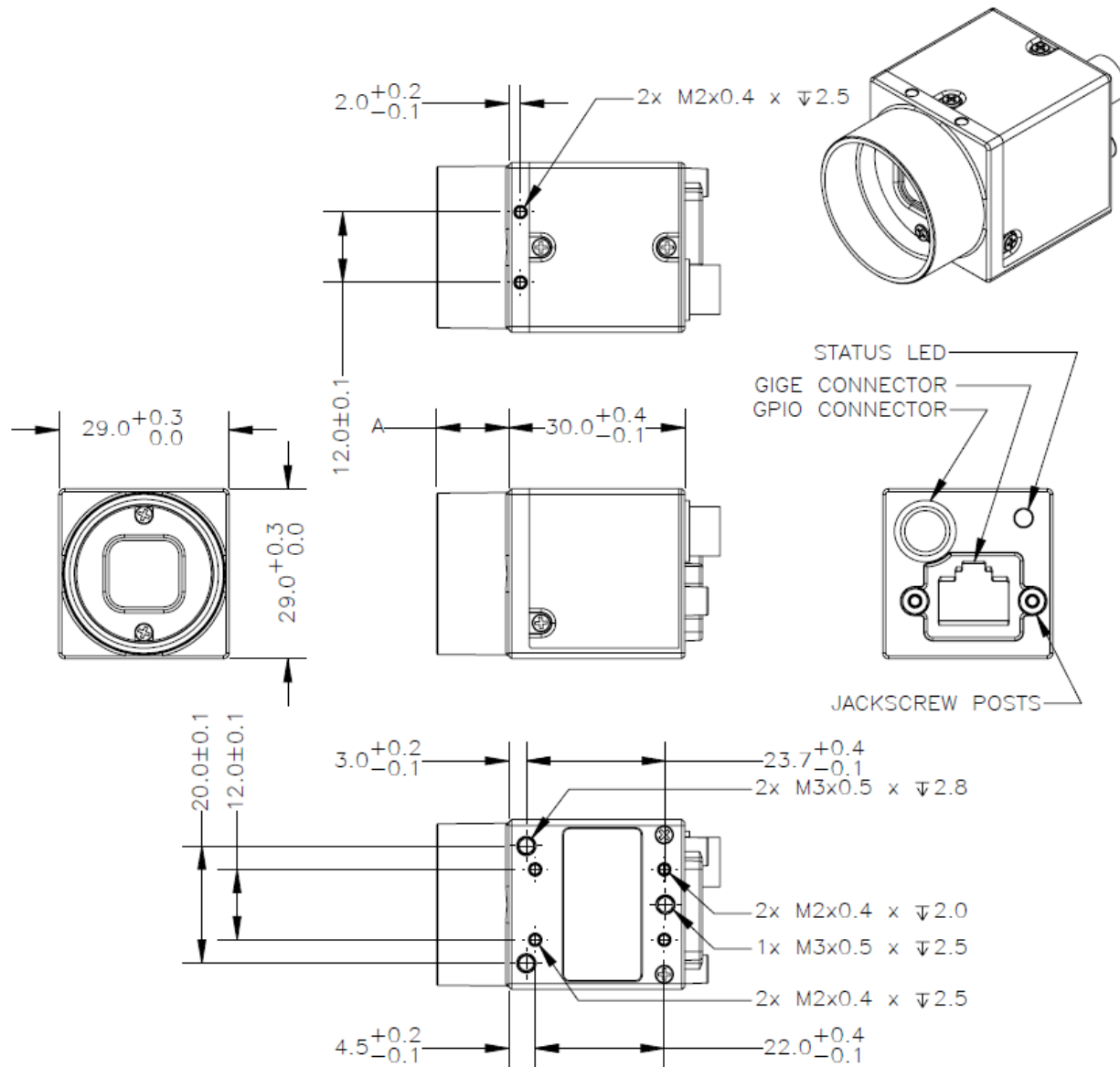
Product appearance and specifications are subject to change without notice

SPECIFICATIONS

	BFS-PGE-23S6M	BFS-PGE-23S6C
Resolution	1920 x 1200	
Base Frame Rate	41 FPS	
Lossless Compression	Supported	
Megapixels	2.3 MP	
Sensor	Sony IMX249, CMOS, 1/1.2"	
Readout Method	Global Shutter	
Pixel Size	5.86 µm	
Spectrum	Mono	Color
Lens Mount	C-mount	
ADC	10-bit / 12-bit	
Minimum Frame Rate*	1 FPS	
Gain Range*	0 – 47 dB	
Exposure Range*	33 µs to 30 seconds	
Acquisition Modes	Continuous, Single Frame, Multi Frame	
Partial Image Modes	Pixel binning, Region of Interest	
Image Processing	Gamma, lookup table, and sharpness	Color correction matrix, gamma, lookup table, saturation, and sharpness
Image Buffer	240 MB	
Sequencer	Up to 8 sets using 6 features	
User Sets	2 user configuration sets for custom camera settings	
Flash Memory	6 MB non-volatile memory	
Opto-isolated I/O	1 input / 1 output	
Non-isolated I/O	1 bi-directional / 1 input	
Serial Port	1 over non-isolated I/O	
Auxiliary Output	3.3 V 120 mA maximum	
Interface	1 Gigabit Ethernet PoE	
Power Requirements	Power over Ethernet (PoE); or 12 V nominal (8 - 24 V)	
Power Consumption	3.5 W maximum PoE	
Dimensions / Mass	29 mm x 29 mm x 30 mm / 36 g	
Machine Vision Standard	GigE Vision v1.2	
Compliance	CE, FCC, KCC, RoHS, REACH. The ECCN for this product is: EAR099	
Temperature	Operating: 0°C to 50° / Storage: -30°C to 60°C	
Humidity (no condensation)	Operating: 20% - 80% / Storage: 20% - 95%	
Warranty	3 years	

*Values are the same in binning and no binning modes

DRAWING

Dimensional drawings:
- $2.0^{+0.2}_{-0.1}$ — 2x M2x0.4 x ↧ 2.5
- 12.0 ± 0.1
- $29.0^{+0.3}_{0.0}$
- $29.0^{+0.3}_{0.0}$
- A — $30.0^{+0.4}_{-0.1}$

STATUS LED
GIGE CONNECTOR
GPIO CONNECTOR
JACKSCREW POSTS

- 20.0 ± 0.1
- 12.0 ± 0.1
- $3.0^{+0.2}_{-0.1}$
- $23.7^{+0.4}_{-0.1}$ — 2x M3x0.5 x ↧ 2.8
- 2x M2x0.4 x ↧ 2.0
- 1x M3x0.5 x ↧ 2.5
- 2x M2x0.4 x ↧ 2.5
- $4.5^{+0.2}_{-0.1}$
- $22.0^{+0.4}_{-0.1}$