

## INDUSTRIAL/MACHINE VISION APPLICATIONS

## FLIR BLACKFLY'S

P/N BFS-PGE-123S6P

## ENABLE NEW APPLICATIONS WITH ONCAMERA POLARIZING FILTERS

This 12 MP model with it's on-camera polarization is well suited for applications dealing with reflective and/or challenging lighting conditions. Ideal for use cases like traffic systems, UAS (unmanned aerial systems), inspection lines with transparent or reflective parts, and other uncontrolled lighting environments. In addition to the Blackfly S' rich feature set, the Spinnaker SDK provides an easy-to-use glare reduction feature making application development and deployment fast and easy. The GigE interface enables a global shutter readout at 10 FPS, or up to 14 FPS with Lossless Compression enabled. Note: oncamera polarization is also available in a 5 MP variant, please see the BFS-PGE-51S5PC-C.
https://www.flir.com/products/blackfly-s-gige/?model=BFS-PGE-123S6P-C

## FEATURES

Dynamically remove reflections from multiple light sources to improve the contrast of transparent and reflective objects.

FLIR's Spinnaker SDK supports visualization and output of polarimetric image data.

Automate more with advanced camera controls, event notifications, chunk data, counters and timers. Increase system output without compromising quality using our Lossless Compression [LLC] feature.

## APPLICATIONS

SURFACE INSPECTION
QUALITY INSPECTION OF COMPOSITE MATERIALS

OUTDOOR APPLICATIONS INCLUDING TRAFFIC MONITORING AND UAVS

MEASURING INTERNAL STRESSES IN PLASTIC PARTS

GiG三

| SPECS | BFS-PGE-123S6P |
| :---: | :---: |
| Resolution | $4096 \times 3000$ |
| Frame Rate | 10 FPS / 14 FPS with Lossless Compression |
| Megapixels | 12.3 MP |
| Chroma | Polarized Mono |
| Sensor | Sony IMX253, CMOS, 1.1" |
| Readout Method | Global shutter |
| Pixel Size | $3.45 \mu \mathrm{~m}$ |
| Lens Mount | C-mount |
| ADC | 10-bit / 12-bit |
| Minimum Frame Rate* | 1 FPS |
| Gain Range* | 0 to 47 dB |
| Exposure Range* | $36 \mu \mathrm{~s}$ to 30 s |
| Acquisition Modes | Continuous, Single Frame, Multi Frame |
| Partial Image Modes | Pixel binning, decimation, ROI |
| Image Processing | Gamma, lookup table, and sharpness |
| Sequencer | Up to 8 sets using 2 features |
| Image Buffer | 240 MB |
| 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 |
| Auxiliary Output | $3.3 \mathrm{~V}, 120 \mathrm{~mA}$ maximum |
| Interface | GigE PoE |
| Power Requirements | Power over Ethernet (PoE), or 12 V nominal ( $8-24 \mathrm{~V}$ ) via GPIO |
| Power Consumption | 3 W maximum (2.8 W nominal) |
| Dimensions/Mass | $29 \mathrm{~mm} \times 29 \mathrm{~mm} \times 30 \mathrm{~mm} / 36 \mathrm{~g}$ |
| Machine Vision Standard | Gige Vision v1.2 |
| Compliance | CE, FCC, RoHS, REACH. The ECCN for this product is: EAR099. |
| Temperature | Operating: $0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$ Storage: $-30^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ |
| Humidity | Operating: 20\% to $80 \%$ (no condensation) Storage: $30 \%$ to $95 \%$ (no condensation) |
| Warranty | 3 years |
| *Values are the same in binning and no binning modes. |  |

## Teledyne FLIR® Integrated Imaging Solutions Inc.

## CANADA

12051 Riverside Way
Richmond, BC, Canada
V6W 1K7
T: +1 866.765.0827 (toll free)
$\mathrm{T}:+1604.242 .9937$
F: +1 604.242.9938
E: mv-sales@teledyneflir.com
www.teledyneflir.com/mv
USA
T: +1 866.765 .0827 (toll free)
E: mv-na-sales@teledyneflir.com

## EUROPE

T: +49 7141 488817-0
F: +49 7141 488817-99
E: mv-eusales@teledyneflir.com

## CHINA

T: +86 1082159938
F: +86 1082159936
E: mv-chinasales@teledyneflir.com
ASIA
E: mv-asiasales@teledyneflir.com
www.teledyneflir.com
©2022 Teledyne FLIR ${ }^{\text {® }}$ Integrated Imaging Solutions Inc. All rights reserved.
Names and marks appearing on the products herein are either registered trademarks or trademarks of Teledyne FLIRe, Inc. and/or its subsidiaries. Specifications are subject to change without notice.

FIND THE BEST BLACKFLY S FOR YOUR NEEDS


