INDUSTRIAL/MACHINE VISION APPLICATIONS

FLIR BLACKFLY® S

P/N BFS-PGE-51S5P

ENABLE NEW APPLICATIONS WITH ON-SENSOR POLARIZING FILTERS

See the world in a whole new way with the FLIR BFS-PGE-51S5P-C. Sony's new IMX250MZR with on-sensor polarizing filters adds polarimetry to the FLIR Blackfly S already powerful feature-set. The GigE interface enables a global shutter readout at 24 FPS in a compact, low power package. This camera is ideal for building the next generation of polarimetry based industrial, traffic and UAS applications.

www.flir.com/mv

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.

Proven combability with popular ARM and x64 SBCs, operating systems, and software ensures support for an entire ecosystem of embedded systems.

APPLICATIONS

SURFACE INSPECTION

QUALITY INSPECTION OF COMPOSITE MATERIALS

DRIVER MONITORING FOR TRAFFIC ENFORCEMENT

MEASURING INTERNAL STRESSES IN PLASTIC PARTS

POLARIZED

GiGE VISION   GEN‹i›CAM   Pregius

SPECS	BFS-PGE-51S5P-C	BFS-PGE-51S5PC-C
Resolution	2448 x 2048	
Frame Rate	24 FPS / 39 FPS with Lossless Compression	
Megapixels	5.0 MP	
Chroma	Polarized	Polarized Color
Sensor	Sony IMX250MZR, CMOS, 2/3"	Sony IMX250MYR, CMOS, 2/3"
Readout Method	Global shutter	
Pixel Size	3.45 µm	
Lens Mount	C-mount	
ADC	10-bit and 12-bit	
Minimum Frame Rate*	1 FPS	
Gain Range*	0 to 47 dB	
Exposure Range*	25 µs to 30 s	
Acquisition Modes	Continuous, Single Frame, Multi Frame	
Partial Image Modes	Pixel binning, decimation, ROI	
Image Processing	Gamma	
Sequencer	Up to 8 sets using 6 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	
Serial Port	Supported	
Time Synchronization	IEEE 1588 PTP	
Auxiliary Output	3.3 V, 120 mA maximum	
Interface	GigE PoE	
Power Requirements	Power over Ethernet (PoE), or 12 V nominal (8 - 24 V) via GPIO	
Power Consumption	3 W maximum	
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: 0ºC to 50ºC Storage: -30ºC to 60ºC	
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.

FIND THE BEST BLACKFLY S FOR YOUR NEEDS

FLIR | The World's Sixth Sense®