FLIRBLACKFLY®S BFS-PGE-123S6

Measurements are taken based on guidelines in the EMVA 1288 standard; the full definition can be found at EMVA.org. Camera settings are: maximum bit depth, 16-bit pixel format, and ISP disabled. The center wavelength is 525 nm unless otherwise noted. Results are captured at room temperature (20°C).

Blackfly S BFS-PGE-123S6P

Quantum Efficiency Blue (% at 470 nm)NANANAQuantum Efficiency Green (% at 525 nm)NANANAQuantum Efficiency Red (% at 630 nm)NANANATemporal Dark Noise (Read Noise) (e-)2.68Temporal Dark Noise (Read Noise) (DN)14.94Signal to Noise Ratio Maximum (dB)40.41Signal to Noise Ratio Maximum (Bits)6.71Absolute Sensitivity Threshold (γ)13.87Absolute Sensitivity Threshold (e-)3.18Saturation Capacity (Well Depth) (e-)10995Saturation Capacity (Well Depth) (γ)47954	Resolution	4096x3000			
Firmware Version ADC Bit Depth 12 Polarization Angle (degrees) Quantum Efficiency Mono (% at 525 nm) Quantum Efficiency Blue (% at 470 nm) Quantum Efficiency Green (% at 525 nm) Quantum Efficiency Green (% at 525 nm) ADC Bit Depth 12 Polarization Angle (degrees) Quantum Efficiency Mono (% at 525 nm) ADC Blue (% at 470 nm) ADC Bit Depth ADC Bit Bit Depth ADC Bit	Sensor	Sony IMX253, CMOS, 1.1			
ADC Bit Depth Polarization Angle (degrees) Quantum Efficiency Mono (% at 525 nm) Quantum Efficiency Blue (% at 470 nm) Quantum Efficiency Green (% at 525 nm) Quantum Efficiency Green (% at 525 nm) Quantum Efficiency Red (% at 630 nm) ANA NA NA NA NA NA NA NA NA	Pixel Size (μm)	3.45			
Polarization Angle (degrees) 0 45 90 135 Quantum Efficiency Mono (% at 525 nm) 22.93 22.07 22.57 22.12 Quantum Efficiency Blue (% at 470 nm) NA	Firmware Version	2109.0.255.0			
Quantum Efficiency Mono (% at 525 nm)22.9322.0722.5722.12Quantum Efficiency Blue (% at 470 nm)NANANAQuantum Efficiency Green (% at 525 nm)NANANAQuantum Efficiency Red (% at 630 nm)NANANATemporal Dark Noise (Read Noise) (e-)2.68Temporal Dark Noise (Read Noise) (DN)14.94Signal to Noise Ratio Maximum (dB)40.41Signal to Noise Ratio Maximum (Bits)6.71Absolute Sensitivity Threshold (γ)13.87Absolute Sensitivity Threshold (e-)3.18Saturation Capacity (Well Depth) (e-)10995Saturation Capacity (Well Depth) (γ)47954	ADC Bit Depth	12			
Quantum Efficiency Blue (% at 470 nm)NANANAQuantum Efficiency Green (% at 525 nm)NANANAQuantum Efficiency Red (% at 630 nm)NANANATemporal Dark Noise (Read Noise) (e-)2.68Temporal Dark Noise (Read Noise) (DN)14.94Signal to Noise Ratio Maximum (dB)40.41Signal to Noise Ratio Maximum (Bits)6.71Absolute Sensitivity Threshold (γ)13.87Absolute Sensitivity Threshold (e-)3.18Saturation Capacity (Well Depth) (e-)10995Saturation Capacity (Well Depth) (γ)47954	Polarization Angle (degrees)	0	45	90	135
Quantum Efficiency Green (% at 525 nm)NANANAQuantum Efficiency Red (% at 630 nm)NANANATemporal Dark Noise (Read Noise) (e-)2.68Temporal Dark Noise (Read Noise) (DN)14.94Signal to Noise Ratio Maximum (dB)40.41Signal to Noise Ratio Maximum (Bits)6.71Absolute Sensitivity Threshold (γ)13.87Absolute Sensitivity Threshold (e-)3.18Saturation Capacity (Well Depth) (e-)10995Saturation Capacity (Well Depth) (γ)47954	Quantum Efficiency Mono (% at 525 nm)	22.93	22.07	22.57	22.12
Quantum Efficiency Red (% at 630 nm)NANANATemporal Dark Noise (Read Noise) (e-)2.68Temporal Dark Noise (Read Noise) (DN)14.94Signal to Noise Ratio Maximum (dB)40.41Signal to Noise Ratio Maximum (Bits)6.71Absolute Sensitivity Threshold (γ)13.87Absolute Sensitivity Threshold (e-)3.18Saturation Capacity (Well Depth) (e-)10995Saturation Capacity (Well Depth) (γ)47954	Quantum Efficiency Blue (% at 470 nm)	NA	NA	NA	NA
Temporal Dark Noise (Read Noise) (e-) 2.68 Temporal Dark Noise (Read Noise) (DN) 14.94 Signal to Noise Ratio Maximum (dB) 40.41 Signal to Noise Ratio Maximum (Bits) 6.71 Absolute Sensitivity Threshold (γ) 13.87 Absolute Sensitivity Threshold (e-) 3.18 Saturation Capacity (Well Depth) (e-) Saturation Capacity (Well Depth) (γ) 47954	Quantum Efficiency Green (% at 525 nm)	NA	NA	NA	NA
Temporal Dark Noise (Read Noise) (DN) Signal to Noise Ratio Maximum (dB) Signal to Noise Ratio Maximum (Bits) Absolute Sensitivity Threshold (γ) Absolute Sensitivity Threshold (e-) Saturation Capacity (Well Depth) (e-) Saturation Capacity (Well Depth) (γ) 47954	Quantum Efficiency Red (% at 630 nm)	NA	NA	NA	NA
Signal to Noise Ratio Maximum (dB) 40.41 Signal to Noise Ratio Maximum (Bits) 6.71 Absolute Sensitivity Threshold (γ) 13.87 Absolute Sensitivity Threshold (e-) 3.18 Saturation Capacity (Well Depth) (e-) Saturation Capacity (Well Depth) (γ) 47954	Temporal Dark Noise (Read Noise) (e-)	2.68			
Signal to Noise Ratio Maximum (Bits) 6.71 Absolute Sensitivity Threshold (γ) 13.87 Absolute Sensitivity Threshold (e-) 3.18 Saturation Capacity (Well Depth) (e-) 10995 Saturation Capacity (Well Depth) (γ) 47954	Temporal Dark Noise (Read Noise) (DN)	14.94			
Absolute Sensitivity Threshold (γ) Absolute Sensitivity Threshold (e-) Saturation Capacity (Well Depth) (e-) Saturation Capacity (Well Depth) (γ) 47954	Signal to Noise Ratio Maximum (dB)	40.41			
Absolute Sensitivity Threshold (e-) Saturation Capacity (Well Depth) (e-) Saturation Capacity (Well Depth) (γ) 47954	Signal to Noise Ratio Maximum (Bits)	6.71			
Saturation Capacity (Well Depth) (e-) Saturation Capacity (Well Depth) (γ) 47954	Absolute Sensitivity Threshold (γ)	13.87			
Saturation Capacity (Well Depth) (γ) 47954	Absolute Sensitivity Threshold (e-)	3.18			
	Saturation Capacity (Well Depth) (e-)	10995			
Dunamia Ramas (dR)	Saturation Capacity (Well Depth) (γ)	47954			
Dynamic Range (dB) /0.77	Dynamic Range (dB)	70.77			
Dynamic Range (Bits) 11.76	Dynamic Range (Bits)	11.76			
Gain (e-/ADU) 0.18	Gain (e-/ADU)	0.18			



Blackfly S BFS-PGE-123S6P Spectral Response Curve

