

EMVA 1288 IMAGING PERFORMANCE

BLACKFLY[®] S CAMERAS

BFS-PGE-50Y2

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-50Y2M	Blackfly S BFS-PGE-50Y2C
Resolution	2592x1944	2592x1944
Sensor	onsemi AR0521, CMOS, 1/2.5	onsemi AR0521, CMOS, 1/2.5
Pixel Size (μm)	2.2	2.2
Firmware Version	2411.2.55.0	2411.2.55.0
ADC Bit Depth	12	12
Quantum Efficiency Mono (% at 523 nm)	80.28	N/A
Quantum Efficiency Blue (% at 457 nm)	N/A	64.43
Quantum Efficiency Green (% at 523 nm)	N/A	73.06
Quantum Efficiency Red (% at 628 nm)	N/A	45.87
Temporal Dark Noise (Read Noise) (e-)	2.95	3.09
Temporal Dark Noise (Read Noise) (DN)	18.93	18.81
Signal to Noise Ratio Maximum (dB)	39.99	40.35
Signal to Noise Ratio Maximum (Bits)	6.64	6.70
Absolute Sensitivity Threshold (γ)	4.41	5.05
Absolute Sensitivity Threshold (e-)	3.54	3.69
Saturation Capacity (Well Depth) (e-)	9976	10838
Saturation Capacity (Well Depth) (γ)	12427	14844
Dynamic Range (dB)	69.00	69.36
Dynamic Range (Bits)	11.46	11.52
Gain (e-/ADU)	0.16	0.17

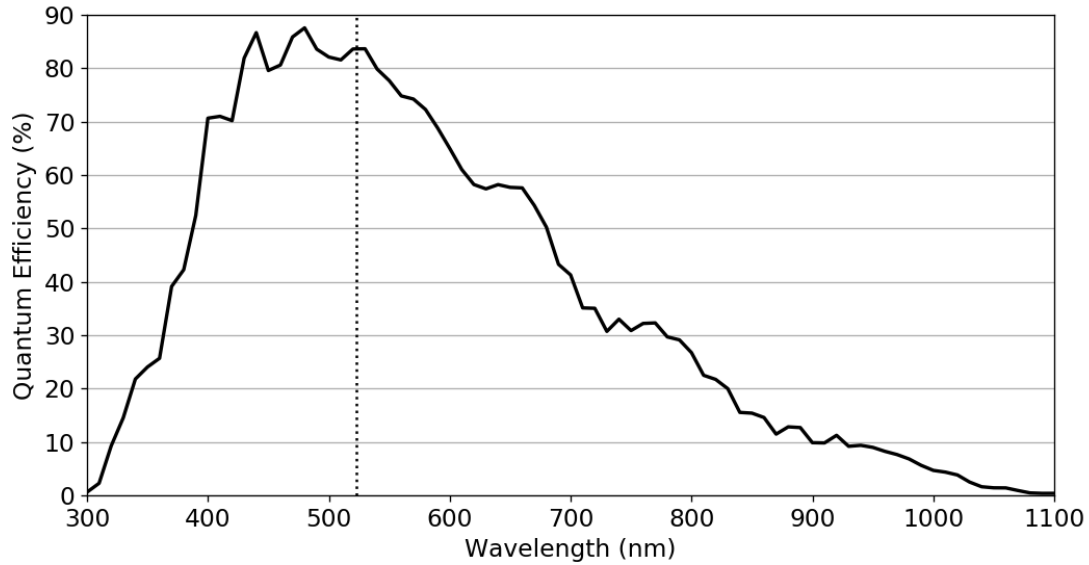
9/12/2025

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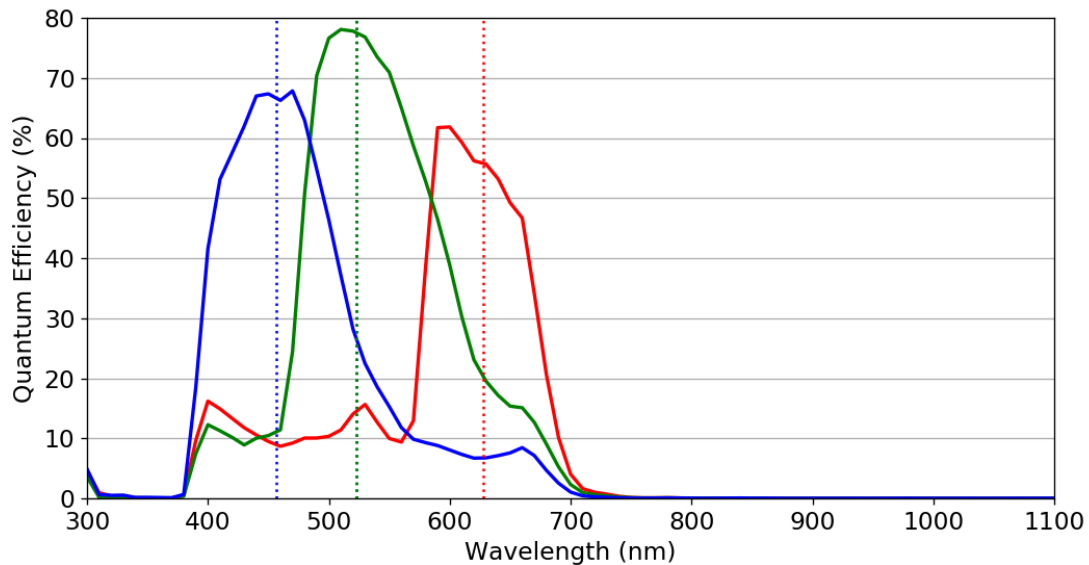
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Blackfly S BFS-PGE-50Y2M Spectral Response Curve



Blackfly S BFS-PGE-50Y2C Spectral Response Curve



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