

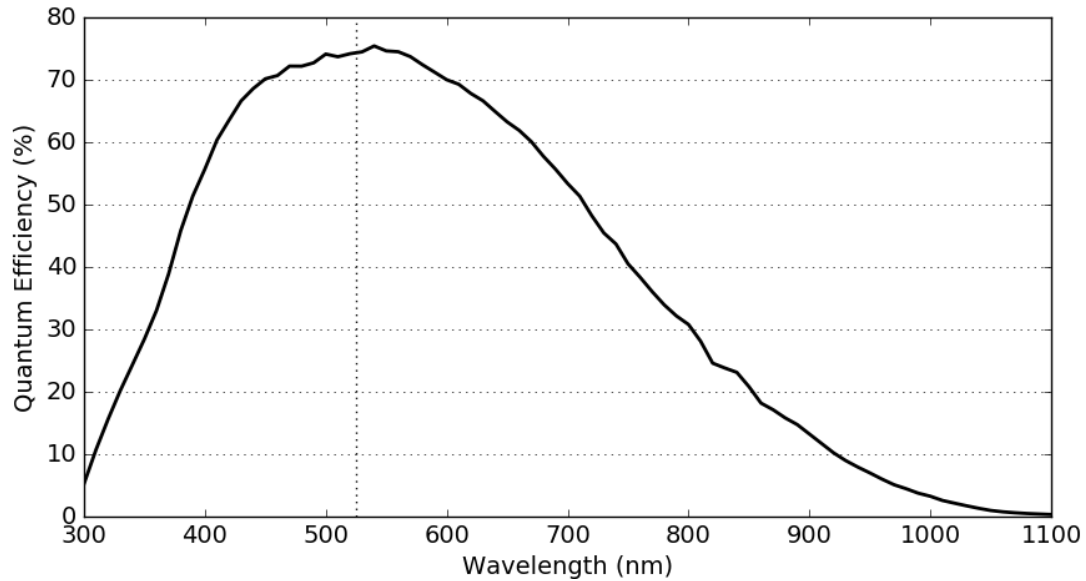
BLACKFLY[®]S

BFS-U3-28S5-BD

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-U3-28S5M-BD		Blackfly S BFS-U3-28S5C-BD	
Resolution	1936x1464		1936x1464	
Sensor	Sony IMX421, CMOS, 2/3		Sony IMX421, CMOS, 2/3	
Pixel Size (μm)	4.5		4.5	
Firmware Version	2202.0.70.0		2202.0.70.0	
ADC Bit Depth	12		12	
Gain Conversion	High	Low	High	Low
Quantum Efficiency Mono (% at 525 nm)	72.19	73.14	N/A	N/A
Quantum Efficiency Blue (% at 470 nm)	N/A	N/A	52.85	53.62
Quantum Efficiency Green (% at 525 nm)	N/A	N/A	63.49	64.29
Quantum Efficiency Red (% at 630 nm)	N/A	N/A	50.42	50.71
Temporal Dark Noise (Read Noise) (e-)	2.59	5.87	2.69	5.84
Temporal Dark Noise (Read Noise) (DN)	15.07	14.87	15.47	14.86
Signal to Noise Ratio Maximum (dB)	40.32	43.94	40.45	43.94
Signal to Noise Ratio Maximum (Bits)	6.70	7.30	6.72	7.30
Absolute Sensitivity Threshold (γ)	4.29	8.72	5.02	9.86
Absolute Sensitivity Threshold (e-)	3.09	6.37	3.19	6.34
Saturation Capacity (Well Depth) (e-)	10754	24777	11095	24751
Saturation Capacity (Well Depth) (γ)	14898	33874	17468	38511
Dynamic Range (dB)	70.82	71.79	70.83	71.83
Dynamic Range (Bits)	11.76	11.92	11.76	11.93
Gain (e-/ADU)	0.17	0.39	0.17	0.39

Blackfly S BFS-U3-28S5M-BD Spectral Response Curve



Blackfly S BFS-U3-28S5C-BD Spectral Response Curve

