

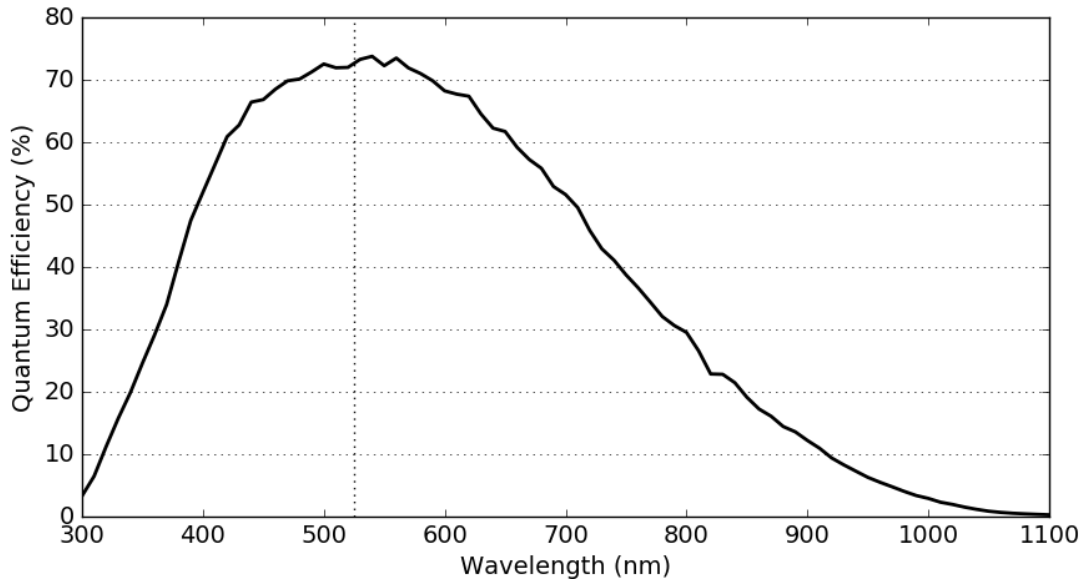
EMVA 1288 IMAGING PERFORMANCE

FLIR BLACKFLY[®]S BFS-PGE-19S4

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-19S4M		Blackfly S BFS-PGE-19S4C	
Resolution	1616x1240		1616x1240	
Sensor	Sony IMX430, CMOS, 1/1.7		Sony IMX430, CMOS, 1/1.7	
Pixel Size (µm)	4.5		4.5	
Firmware Version	2103.0.347.0		2103.0.347.0	
ADC Bit Depth	12		12	
Gain Conversion	High	Low	High	Low
Quantum Efficiency Mono (% at 525 nm)	70.85	71.58	N/A	N/A
Quantum Efficiency Blue (% at 470 nm)	N/A	N/A	52.13	52.59
Quantum Efficiency Green (% at 525 nm)	N/A	N/A	62.91	63.40
Quantum Efficiency Red (% at 630 nm)	N/A	N/A	49.09	50.00
Temporal Dark Noise (Read Noise) (e-)	2.60	5.81	2.58	5.87
Temporal Dark Noise (Read Noise) (DN)	14.98	14.68	14.90	14.76
Signal to Noise Ratio Maximum (dB)	40.38	43.99	40.42	44.01
Signal to Noise Ratio Maximum (Bits)	6.71	7.31	6.71	7.31
Absolute Sensitivity Threshold (γ)	4.37	8.82	4.90	10.05
Absolute Sensitivity Threshold (e-)	3.10	6.31	3.08	6.37
Saturation Capacity (Well Depth) (e-)	10920	25090	11011	25186
Saturation Capacity (Well Depth) (γ)	15413	35050	17500	39722
Dynamic Range (dB)	70.95	71.99	71.06	71.93
Dynamic Range (Bits)	11.78	11.96	11.80	11.95
Gain (e-/ADU)	0.17	0.40	0.17	0.40

Blackfly S BFS-PGE-19S4M Spectral Response Curve



Blackfly S BFS-PGE-19S4C Spectral Response Curve

