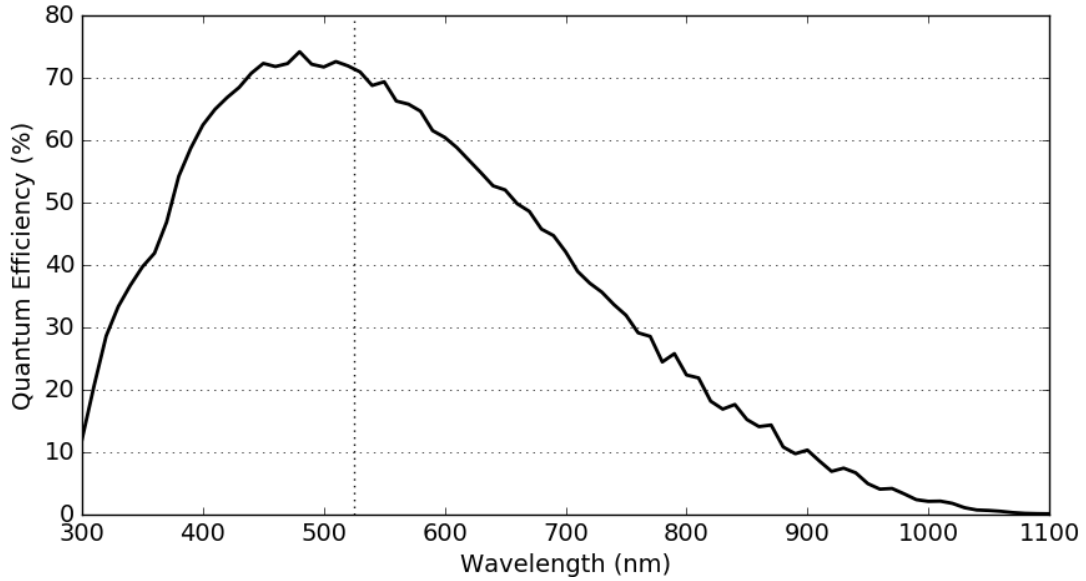# EMVA 1288 IMAGING PERFORMANCE

FLIR BLACKFLY®S
BFS-PGE-161S7

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-161S7M	Blackfly S BFS-PGE-161S7C
Resolution	5320x3032	5320x3032
Sensor	Sony IMX542, CMOS, 1.1	Sony IMX542, CMOS, 1.1
Pixel Size (μm)	2.74	2.74
Firmware Version	2011.4.31.0	2011.4.31.0
ADC Bit Depth	12	12
Quantum Efficiency Mono (% at 525 nm)	69.26	N/A
Quantum Efficiency Blue (% at 470 nm)	N/A	45.76
Quantum Efficiency Green (% at 525 nm)	N/A	52.26
Quantum Efficiency Red (% at 630 nm)	N/A	33.49
Temporal Dark Noise (Read Noise) (e-)	2.34	2.38
Temporal Dark Noise (Read Noise) (DN)	15.51	15.54
Signal to Noise Ratio Maximum (dB)	39.81	39.83
Signal to Noise Ratio Maximum (Bits)	6.61	6.62
Absolute Sensitivity Threshold (γ)	4.10	5.52
Absolute Sensitivity Threshold (e-)	2.84	2.88
Saturation Capacity (Well Depth) (e-)	9562	9609
Saturation Capacity (Well Depth) (γ)	13806	18428
Dynamic Range (dB)	70.55	70.46
Dynamic Range (Bits)	11.72	11.70
Gain (e-/ADU)	0.15	0.15

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Blackfly S BFS-PGE-161S7M Spectral Response Curve

Blackfly S BFS-PGE-161S7C Spectral Response Curve

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