

EMVA 1288 IMAGING PERFORMANCE

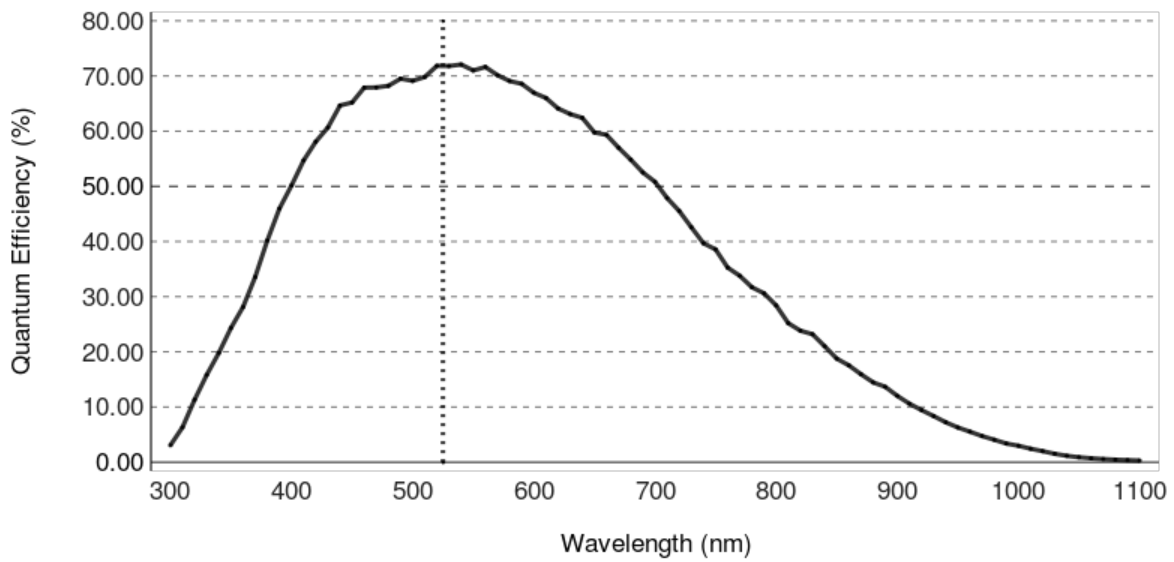
FLIR BLACKFLY[®]S

BFS-U3-17S7

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-U3-17S7M		Blackfly S BFS-U3-17S7C	
Resolution	1600x1100		1600x1100	
Sensor	IMX425 (1.1, CMOS, Global Shutter)		IMX425 (1.1, CMOS, Global Shutter)	
Pixel Size	9		9	
Firmware Version	1910.0.122.0		1910.0.122.0	
ADC Bit Depth	12		12	
Gain Conversion	High	Low	High	Low
Quantum Efficiency Mono (% at 525 nm)	71.50	70.09	N/A	N/A
Quantum Efficiency Blue (% at 470 nm)	N/A	N/A	53.49	52.57
Quantum Efficiency Green (% at 525 nm)	N/A	N/A	63.94	62.55
Quantum Efficiency Red (% at 630 nm)	N/A	N/A	52.68	51.53
Temporal Dark Noise (Read Noise) (e-)	4.69	22.99	4.77	23.28
Temporal Dark Noise (Read Noise) (DN)	15.34	14.98	15.56	15.15
Signal to Noise Ratio Maximum (dB)	42.91	49.94	42.94	49.86
Signal to Noise Ratio Maximum (Bits)	7.13	8.30	7.13	8.28
Absolute Sensitivity Threshold (γ)	7.26	33.52	8.24	37.99
Absolute Sensitivity Threshold (e-)	5.19	23.49	5.27	23.78
Saturation Capacity (Well Depth) (e-)	19557.10	98654.00	19687.10	96889.20
Saturation Capacity (Well Depth) (γ)	27353.40	140761.00	30776.10	154792.00
Dynamic Range (dB)	71.53	72.46	71.45	72.20
Dynamic Range (Bits)	11.88	12.04	11.87	11.99
Gain (e-/ADU)	0.31	1.53	0.31	1.54

Blackfly S BFS-U3-17S7M Spectral Response Curve



Blackfly S BFS-U3-17S7C Spectral Response Curve

