



STX-16803 Typical Specifications



CCD	
CCD	KAF-16803
Architecture	Full Frame CCD; Square Pixels
Number of Active Pixels	4096 (H) x 4096 (V) = 16.8 Mp
Pixel Size	9 μm (H) x 9 μm (V)
Active Image Size	36.8mm (H) x 36.8mm (V)
Saturation Signal	100 K e-
Quantum Efficiency (550nm)	60%
Read Noise (f=4 MHz)	9e-
Dark Signal (T=25°C)	3 e/pix/sec
Dark Signal Doubling Temp.	6.3° C
Linear Dynamic Range	80 dB
Blooming Protection	> 100X saturation exposure

Readout Specifications	
Shutter	Mechanical, even illumination
Exposure	0.1 to 3600 seconds
Correlated Double Sampling	Yes
A/D Converter	16 bits
A/D Gain	1.27e-/ADU
Binning Modes	1 x 1, 2 x 2, 3 x 3, 9x 9, 1 x n

Pixel Digitization Rates	1.8 million pixels per second
Full Frame Download	2 seconds after digitization - 11.5 seconds including digitization

System Specifications	
Cooling – standard	Two Stage Thermoelectric, Variable Fan, -50°C delta w/air only. Water cooling ready.
Temperature Regulation	±0.1°C
Power	12VDC at 6 amps, universal power supply included
Computer Interface	Ethernet and USB 2.0
Computer Compatibility	<ul style="list-style-type: none"> Windows (all Windows O/S supporting USB 2.0 including Vista 32 and 64 bit, Windows 7) Mac

Physical Dimensions	
Optical Head (excluding fan)	6 x 6 x 3.5 inches
Mounting	3" threaded accessory plate
Weight	Approx. 5 pounds (2.27kg)

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