

1000 Series Camera Head 3344

Specifications (Subject to Change Without Notice)

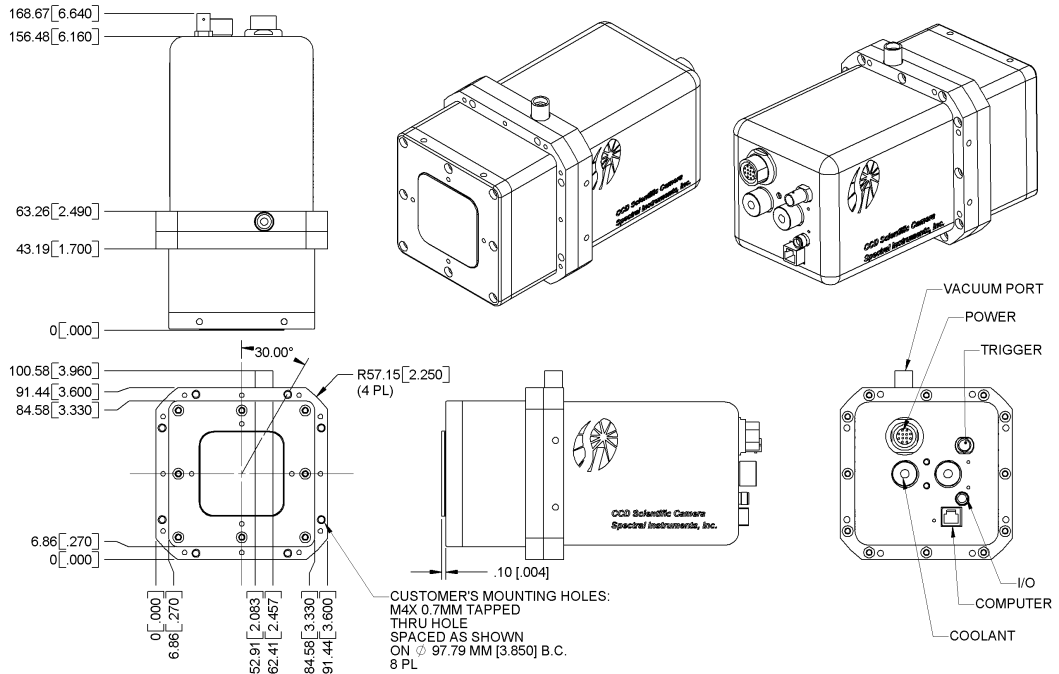
Camera Performance	
Digitization Precision	16 Bits
Number of Readout Ports	1
Readout Speeds	1MHz, 680kHz
Typical Readout Noise @ 1MHz	9.2e ⁻
Maximum Readout Noise @ 1MHz	≤ 12.0e ⁻
Typical Readout Noise @ 680kHz	7.7e ⁻
Maximum Readout Noise @ 680kHz	≤ 10.0e ⁻
Operating Temperature	-20°C ± 5°
Typical Dark Current @ -20°C	0.1e ⁻ /pixel/second
Maximum Dark Current @ -20°C	≤ 0.5e ⁻ /pixel/second
Cooling Method	TEC with chilled water/glycol
Typical Single Pixel Full Well	100,000e ⁻
Minimum 1x1 binned Full Well	≥ 85,000e ⁻
Linearity from 0% to 80% of Full Well	2% +150 e ⁻
Typical Serial CTE at 5000e ⁻ level	0.99998
Minimum Serial CTE at 500e ⁻ level	≥ 0.99995
Typical Parallel CTE at 5000e ⁻ level	0.99999
Minimum Parallel CTE at 500e ⁻ level	≥ 0.99995
Operating Temperature Range	+15°C to +35°C
Operating Humidity Range	< 60% Relative Humidity
Software	Labview based SI Image
Drivers	Windows and Linux available

CCD Details	
Manufacturer	Eastman Kodak Image Sensor Solutions
Model	KAF16801E Front Illuminated
Active Array Size	4096 x 4096 pixels
Pixel Size	9 μm x 9 μm
Active Image Area	36.8 x 36.8 mm
Architecture	Full Frame Two Phase Clocking
Front Side Process	Enhanced Blue Response

Communication	
Trigger Signal In	ST Fiber Optic or 50 Ohm Terminated SMA*
Shutter Sync Out	TTL SMA*
Data	Fiber Optic Cable to SI PCI board

* Note: SMA connector can be configured as Trigger in or Sync out

Fiber Optic Input	
Input Fiber Characteristics	6-micron Enhanced EMA
Input Fiber Shape	40-mm square corners rounded
Fiber Front Extension	0.1-mm
Typical Resolution	40 lpm



KAF 16801 ITO Q.E.

