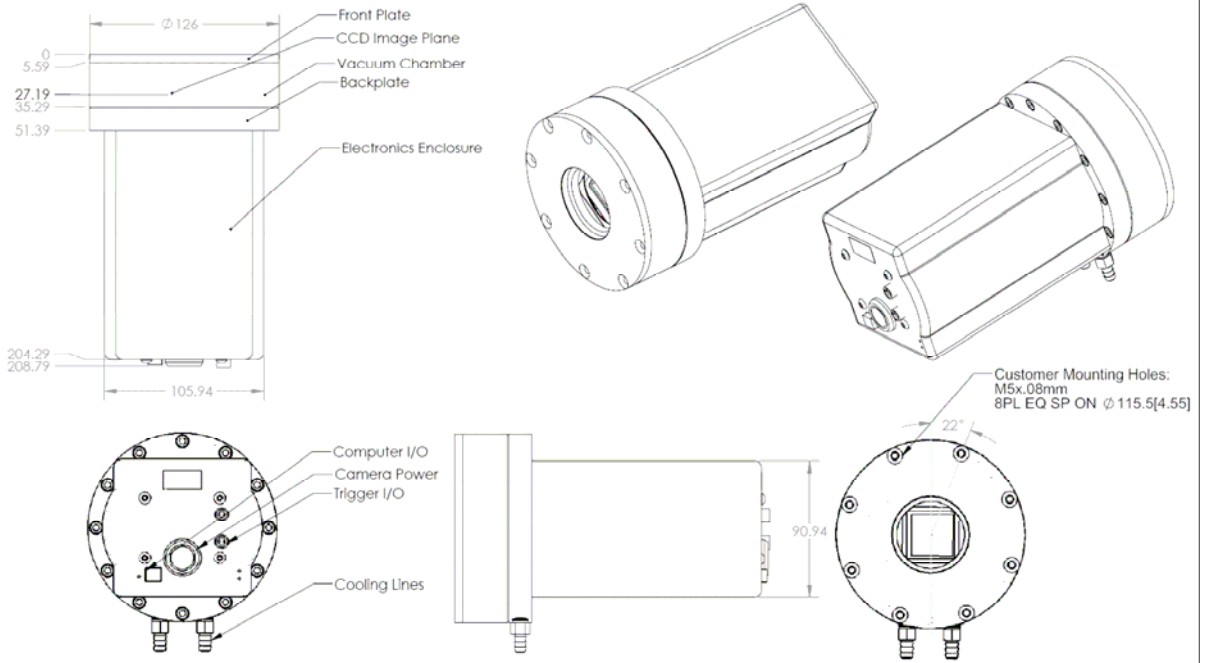


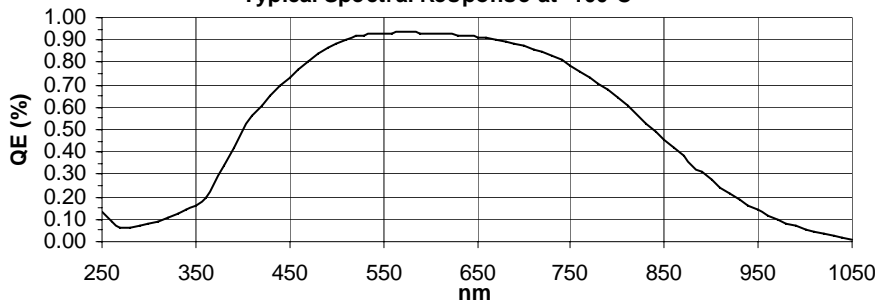
Specifications (Subject to Change Without Notice)

Camera Performance	
Digitization Precision	16 Bits
Number of Readout Ports	1 or 2 (opt)
Cooling	TEC with chilled water
Operating Temperature	-90°C
Typical Dark Current @ -90°C	0.0002e ⁻ /pixel/second
Maximum Dark Current @ -90°C	≤ 0.001e ⁻ /pixel/second
Typical Readout Noise @ 100kHz	2.9 e ⁻
Maximum Readout Noise @ 100kHz	≤ 4.0 e ⁻
Typical Readout Noise @ 800kHz	7.7 e ⁻
Maximum Readout Noise @ 800kHz	≤ 8.5 e ⁻
Typical Serial CTE at 5000e ⁻ level	0.999996
Minimum Serial CTE at 200e ⁻ level	≥ 0.999995
Typical Parallel CTE at 5000e ⁻ level	0.999999
Minimum Parallel CTE at 200e ⁻ level	≥ 0.999995
Typical 2x2 binned Full Well	140,000 e ⁻
Typical Single Pixel Full Well	100,000 e ⁻
Minimum 1x1 binned Full Well	90,000 e ⁻
Linearity from 0% to 80% of Full Well	1% +50 e ⁻
Operating Temperature Range	+15°C to +35°C
Operating Humidity Range	< 60% Relative Humidity
Shutter Type	45mm clear aperture (optional)
Min. Exposure	30.0ms
Readout Speeds	100kHz, 200kHz, 400kHz, 800kHz
Min Full Frame Readout Time, 1x1 binned	7.1 seconds (1-port)
Min Full Frame Readout Time, 2x2 binned	2.7 seconds (1-port)

CCD Details	
Manufacturer	E2V Technologies
Model	CCD42-40 AIMO Back Illum.
Active Array Size	2048 x 2048 pixel
Pixel Size	13.5 μm x 13.5 μm
Active Image Area	27.6 x 27.6 mm
Architecture	Full Frame Dual Port
Backside Process	Basic Process
AR Coating	Mid-band
Communication	
Trigger Connection	4 pin LEMO
Trigger Signals In	TTL or Opto-Isolated
Shutter Sync Out	TTL or Opto-Isolated
Shutter Connection	2 pin LEMO
Data	Gigabit FO to PCI interface
Drivers	Windows and Linux available
Software	Labview Based SI Image
Camera System Features	
Service Interval	Sealed Camera. No service Required.
CCDs Available	Most scientific grade CCDs available on request.
Multi-Port readout	1 or 2 ports as supported by the CCD.
Optical Configuration	A range of optical windows, shutters, etc. available on request.
Supply Input	110-240VAC 50/60Hz



Typical Spectral Response at -100°C



Minimum Response (QE): 15% @ 350nm, 40% @ 400nm, 85% @ 500nm, 85% @ 650nm, 30% @ 900nm



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