



Memo Title: MityCCD Camera Performance Summary
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Performance Summary

CCDsp Model	MityCCD-E3011BI	MityCCD-E3011-BI DD	MityCCD-E3011- FI DD	MityCCD-E3011-FI	MityCCD-E3011-OE	MityCCD-H7031-1008	MityCCD-H9973-1008	MityCCD-H9971-1008	MityCCD-H10141-1008
Sensor	Back Illuminated	Back Illuminated, Deep Depletion	Front Illuminated , Deep Depletion	Front Illuminated	Open Electrode	Back Illuminated	Front Illuminated	Front Illuminated	Back Illuminated
Resolution	1024 x 256	1024 x 256	1024 x 256	1024 x 256	1024 x 256	1024 x 250	1024 x 252	1024x252	1024 x 250
Pixel Size	26 μm x26 μm	26 μm x26 μm	26 μm x26 μm	26 μm x26 μm	26 μm x26 μm	24 μm x24 μm	24 μm x24 μm	24 μm x24 μm	12 μm x12 μm
Typical Peak Output Signal	500 K ē/pixel	700 K ē/ pixel	700 K ē/ pixel	500 K ē/ pixel	300 K ē/ pixel	320 K ē/ pixel	480 K ē/ pixel	300 K ē/ pixel	75 K ē/ pixel
Temperature (from 20°C)	-55°C	-55°C	-55°C	-55°C	-55°C	-15°C	-15°C	-15°C	-15°C
Cooled Dark Current	.5ē/pixel/second	700 ē/pixel/second	300 ē/pixel/second	0.05 ē/pixel/second	0.1ē/pixel/second	1.5 ē/pixel/second	TBD	1.5 ē/pixel/second	0.8ē/pixel/second
Total Camera Noise (1ms exposure)	13.3 ē rms	14.0 ē rms	12.4 ē rms	12.4 ē rms	12.4 ē rms	11.4 ē rms	TBD	6.5 ē rms	TBD

Table 1: MityCCD Scientific Camera Performance Summary