

SPECIFICATIONS

CCD image sensor	2D InGaAs focal plane array	
CCD format	640 x 512 imaging pixels	
CCD image area	12.8 mm x 10.24 mm	
Pixel size	20 μm x 20 μm	
Pixel well capacity (e ⁻)	High Gain ≥ 40,000	High Capacity ≥ 600,000
Nominal gain (e ⁻ /count)	1	14
Typical system read noise (e ⁻)	< 120 ¹ (High Gain)	
Response nonlinearity: High gain	< 2 ² %	
Cooling temp. @ +20°C ambient	-80°C (guaranteed), -85°C (typical with Air +15°C liquid circulation)	
Cooling method	Air only, liquid only, or a combination of air and liquid	
Dark current (e ⁻ /p/sec) @ -80°C	~ 150 ³	
Blemish specification	Grade A: <2% defects For detailed blemish specifications, contact Princeton Instruments	
Digitization	16 bits	
Scan rate	2 MHz, 5 MHz, 10 MHz	
Frame rate	22 fps @ 2 MHz 55 fps @ 5 MHz 110 fps @ 10 MHz	
Binning and ROI	Software only	
Cold shield	f#/1.5	
Exposure time	< 2 μs to >1min	
Window material	Fused Silica (AR coated)	
Thermostating precision	±0.05°C across entire temperature range	
Operating temperature	0°C to +30°C	
Certification	CE	
Weight / Dimensions (C-mount)	9.5 lbs (4.3 kg) / 7.40" x 5.8" x 5.8" (187.96 mm x 147.32 mm x 147.32 mm) (L x W x H)	
Weight / Dimensions (SP-mount)	9.5 lbs (4.3 kg) / 7.297" x 5.8" x 5.8" (185.34 mm x 147.32 mm x 147.32 mm) (L x W x H)	

1 Measured with 1 μs exposure time

2 Linearity for exposure > 20 ms

3 Measured with a cold target at -174°C (+99°F)

All specifications are typical. Subject to change without notice.