



# CLAS-2D™ Wavefront Sensor Specifications

Visible Wavefront Sensors (300-1100nm)									
Sensor Specifications								Physical Specifications	
	Sensitivity <sup>1</sup> (rms)	Dynamic Range <sup>2</sup> (±)	Lenslet Diameter	Focal Length	Number of Lenslets	Exposure Range <sup>3</sup>	Other	Weight & Size	Electrical Power <sup>4</sup>
<b>CLAS-HP™ Preliminary Specs</b>	λ/250	115 λ	280μm	29.62mm	51x51	33μs- 10sec	Aperture size: 15mm x 15mm CCD Pixel size: 7.4μm x 7.4μm 12 Bit Data 7.5 Hz frame rate	13 oz 2.64"x2.64"x1.85"	5.1Watts
	λ/200	105 λ	224μm	19.92mm	64x64				
	λ/150	169 λ	140μm	7.78mm	102x102				
	λ/100	211 λ	112μm	4.98mm	128x128				
<sup>2</sup> Waves of tilt @ 635nm; Minimum radius of curvature: 50mm									
XP Wavefront Sensors (193-1100nm)									
Sensor Specifications								Physical Specifications	
<b>CLAS-XP™</b>	λ/200	30λ	252μm	25mm	29x29	40μs- 1sec	Aperture Size: 7.4x7.4mm CCD Pixel Size: 7.4x7.4μm 10 Bit Data Resolution 30 Hz Frame Rate	6.4 oz. 3.97"x2.06"x2.06"	6.0 Watts
	λ/150	40λ	198μm	15.5mm	37x37				
	λ/100	60λ	144μm	8mm	51x51				
	λ/50	80λ	108μm	4.6mm	68x68				
	λ/30	120λ	72μm	2mm	102x102				
IR Wavefront Sensors (1050-1700nm)*									
Sensor Specifications								Physical Specifications	
	Sensitivity <sup>1</sup> (rms)	Dynamic Range <sup>2</sup> (±)	Lenslet Diameter	Focal Length	Number of Lenslets	Exposure Range <sup>3</sup>	Other	Weight & Size	Electrical Power <sup>4</sup>
<b>CLAS- NearIR- 320™</b>	λ/100	37λ	480μm	36.99mm	20x16	128μs- 32ms	Aperture Size: 9.6x7.7mm CCD Pixel Size: 30x30μm 12 Bit Data Resolution 60 Hz Frame Rate	8 oz. 2"x2"x2"	4.0 Watts
	λ/83	44λ	400μm	25.69mm	24x19				
	λ/70	53λ	480μm	25.74mm	20x16				
	λ/67	54λ	320μm	16.44mm	30x24				
	λ/58	63λ	400μm	17.87mm	24x19				
λ/46	78λ	320μm	11.44mm	30x24					
<b>CLAS- NearIR-640™</b>	λ/150	50λ	325μm	17mm	49x39	10μs-32ms	Aperture Size: 16x12.8mm CCD Pixel Size: 25x25μm 14 Bit Data Resolution 30 Hz Frame Rate	38.4 oz. 6.95"x3.0"x3.0"	5.0 Watts
	λ/100	65λ	375μm	18.1mm	42x34				
	λ/75	60λ	275μm	12.2mm	58x46				
	λ/50	55λ	225μm	9.3mm	71x56				
<sup>2</sup> Waves of tilt @ 1550nm; Minimum radius of curvature: 50mm									
<sup>1</sup> Minimum measurable wavefront with 4 <sup>th</sup> order Zernike reconstructor <sup>3</sup> Asynchronous pulsed available <sup>4</sup> Sensor head only All computers are available for portable upgrade *Not available for International sale <b>Specifications are subject to change without notice.</b>									