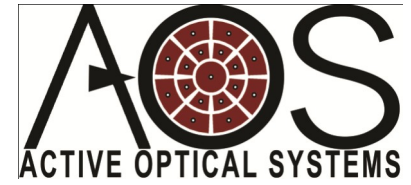


SU320KTSW-1.7RT Shack-Hartmann Wavefront Sensor



FEATURES

- Typically $< \lambda/10$ RMS wavefront error
- Starting at \$49,999
- Responsive beyond the silicon band into the infrared including at laser wavelengths including 1319 nm, 1550 nm, and 1064nm
- Custom aperture or lens arrays are possible
- Integrated alignment stage included

APPLICATIONS

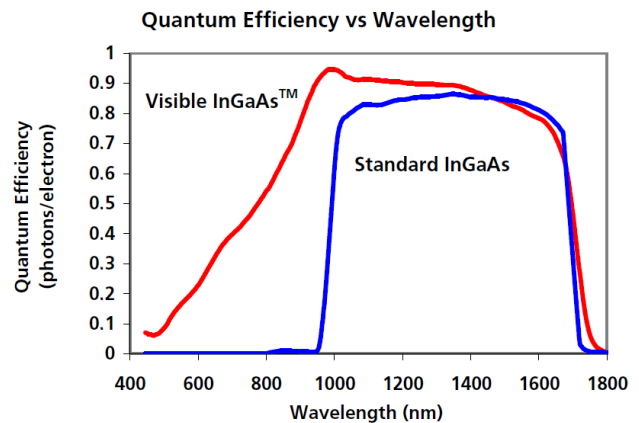
- Adaptive Optics
- Optical Metrology
- Lens Focal Length Measurement
- Optical System Alignment

DESCRIPTION

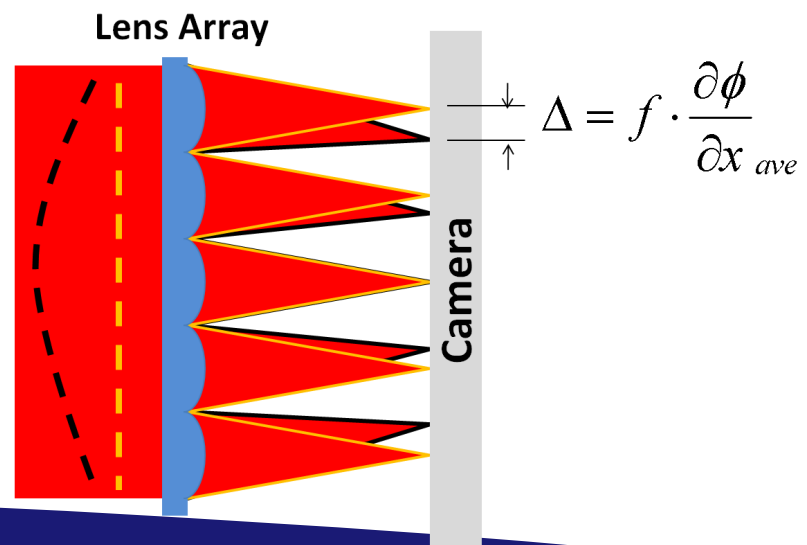
AOS manufactures a variety of different wavefront sensors and can customize a wavefront sensor to meet your needs. This camera-link wavefront sensor can be made into a Hartmann sensor with an array of apertures or a Shack-Hartmann wavefront sensor. The AOS wavefront analysis software includes capability for metric and conventional wavefront control with the purchase of an AOS drive electronics and an AOS deformable mirror. We can integrate almost any lens (aka lenslet) array with this camera to make a custom device.



Spectral Response



Theory of Operation



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Typical Specifications

Parameter	Shack-Hartmann	Notes
Hartmann Array/ Lens Array Parameters		
Aperture Size (μm)	108	Customization Possible
Separation from Camera (mm)	4	
Wavelength Range (nm)	400-1750	Calibration at 1550nm
Spatial resolution (apertures)	80 x 60	320 x 240 Frame, 25 μm pixels
Performance Parameters		
RMS Wavefront Slopes ($\mu\text{radians}$)	500	Estimated
RMS Wavefront Error (nm)	<175	Estimated
Maximum Radius of Curvature (m)	5.9	Estimated
Minimum Radius of Curvature (m)	0.17	Estimated
Measurement frequency (Hz)	60	Faster in a reduced frame

Windows Software

