



WaveFront Sensor ShaH-04130

- The ShaH-04130 - industrial Shack-Hartman wavefront sensor is intended for a wide range of applications including fast and precise quality control of optical elements, airflow analysis, measurement of laser beam parameters, etc.
- A special high-precision algorithm for locating hartmann image spots centers provides very accurate measurements even in difficult viewing conditions.
- The SDK (C++) allows to operate all functions of the sensor and to achieve easy integration with user software.

TECHNICAL SPECIFICATIONS.

Aperture dimension (diameter)	4.5 mm
Spatial resolution	300 μm
Number of points for analysis	200
Maximum tilt normal/extended mode	$\pm 35/100$ mrad
Minimum measured curvature	0.06 m
Repeatability RMS	1 nm
Absolute measurement accuracy RMS	$\lambda/100$ *
Relative measurement accuracy RMS (At maximum angular source size <5 mrad)	$\lambda/650$
Relative measurement accuracy P-V (Within 90% of input aperture)	$\lambda/160$
Tilt measurement sensitivity	0.9 μrad
Curvature measurement sensitivity	1.2 km
Acquisition frequency	130 Hz
Processing time per frame	1 μs
Hartmann image acquisition	10 bit
Working wavelength	170 ** - 300-1000 nm
Calibrated waveband	200 nm
Maximal exposure (at wavelength 700 nm)	0.03 nJ/cm ²
Working temperature	0-+50 °C
Weight	250 g
Dimensions (LxHxW)	50x50x80 mm
CameraLink Cable	MDR Male-to-Male

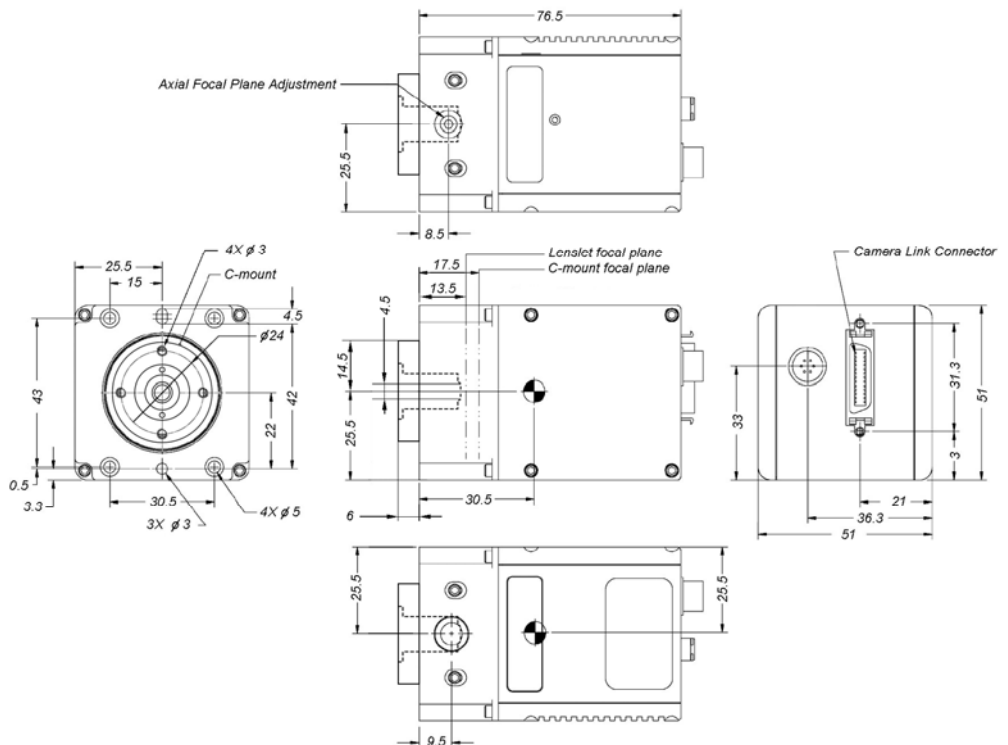


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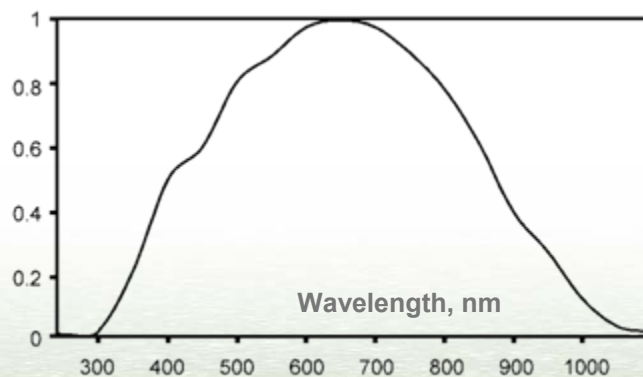
TECHNICAL SPECIFICATIONS	
Operating system	Windows 2000/XP/Vista
Output data	<ul style="list-style-type: none"> • Sequence of raw hartmann images • Spot shift map • Wavefront aberration map (3D plot, 2D projection, synthesized interferogram, up to 55 Zernike polynomials) • Measurement error map • PSF (point spread function) • MTF (modulation transfer function) • Strehl ratio • M2 factor • Gauss-Hermite modes

* Better accuracy available upon request
** with UV Options

MECHANICAL DIMENSIONS



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