



- The ShaH-03500 - 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.

VISIONICA

WaveFront Sensor ShaH-03500

TECHNICAL SPECIFICATIONS

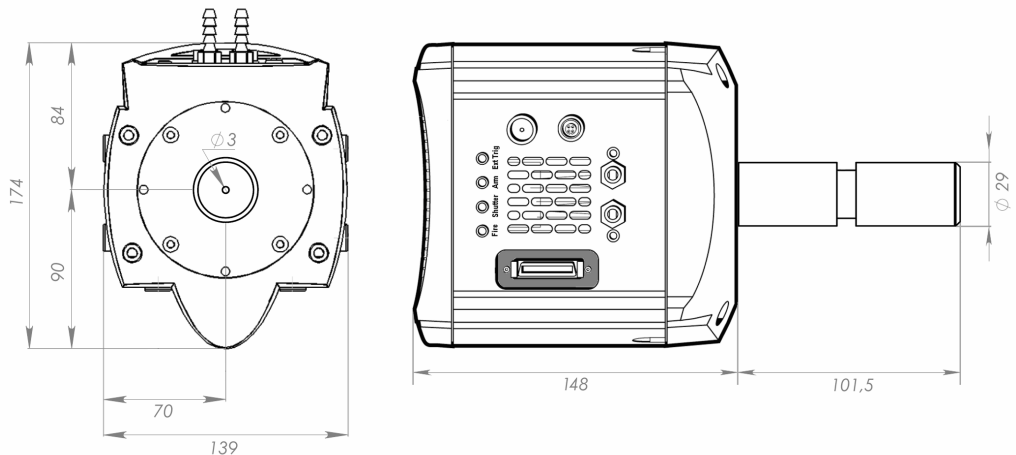
Aperture diameter	3 mm
Spatial resolution	150 μm
Number of points for analysis	400
Maximum tilt normal/extended mode	$\pm 25/75$ mrad
Minimum curvature	± 60 mm
Repeatability RMS	0.5 nm
Absolute accuracy RMS	$\lambda/100$ *
Relative accuracy RMS (at maximum angular source size <10 mrad)	$\lambda/1000$
Relative measurement accuracy P-V (within 90% of input aperture)	$\lambda/300$
Tilt measurement sensitivity	0.6 μrad
Curvature measurement sensitivity	1.1 km
Acquisition frequency normal/binning mode	515 Hz
Processing frequency	up to 515 Hz
Hartmann image acquisition	16 bit
Working wavelength	200-1100 nm
Calibrated waveband	200 nm
Maximal exposure (at wavelength 550 nm)	0.4 nJ/cm ²
Working temperature	from 0 to +30 °C
Weight	2.9 kg
Dimensions	250x140x175 mm

* Better accuracy available upon request



Cooling	Air/Water (using Re-circulator or Chiller)
Operating system	Windows 2000/XP/Vista/7/8 (32/64-bit)
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) • Defocus/Curvature/Astigmatism • PSF (point spread function) • MTF (modulation transfer function) • Strehl ratio • M2 factor • Gauss-Hermite modes • Turbulence parameters C_n^2, R_0 and other

DIMENSIONS



SPECTRAL RESPONSIVITY

