• The ShaH-0530 - 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.

WaveFront Sensor ShaH-0530

TECHNICAL SPECIFICATIONS	
Aperture dimension (diameter)	5 mm
Spatial resolution	125 µm
Number of points for analysis	1500
Maximum tilt	±25 mrad
Minimum measured curvature	±0.1 m
Repeatability RMS	0.4 nm
Absolute measurement accuracy RMS	λ/100 *
Relative measurement accuracy RMS (At maximum angular source size <13 mrad)	λ/2000
Relative measurement accuracy P-V (Within 90% of input aperture)	λ/500
Tilt measurement sensitivity	0.3 µrad
Curvature measurement sensitivity	5.5 km
Acquisition frequency normal/binning mode	30 Hz
Processing frequency	up to 30 Hz
Hartmann image acquisition	8/10 bit
Working wavelength	300-1100 nm
Calibrated waveband	300 nm
Maximal exposure (at wavelength 700 nm)	3.5 nJ/cm^2
Working temperature	10-+45 ˚C
Weight	100 g
Dimensions (LxHxW)	30x30x40 mm
Interface/power supply	IEEE1394

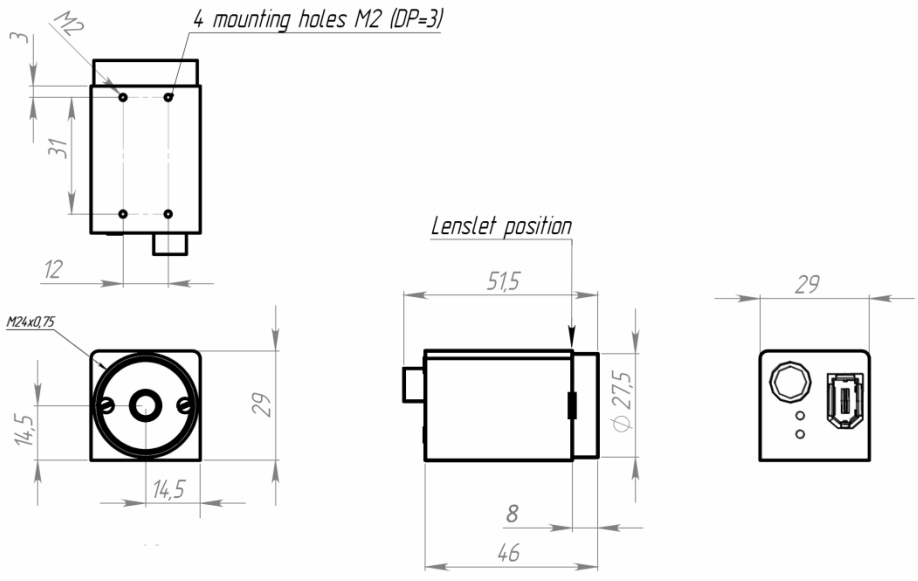
Visionica Ltd.
2011

WaveFront Sensor ShaH-0530

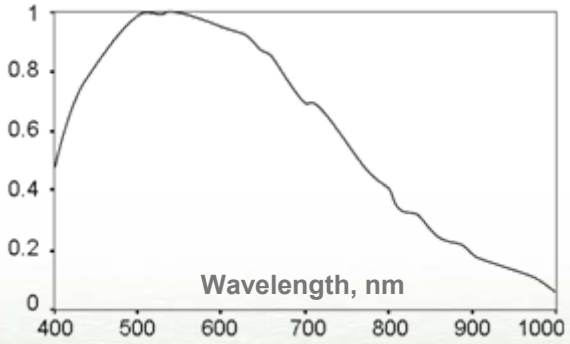
TECHNICAL SPECIFICATIONS	
Operating system	**Windows 2000/XP/Vista**
Output data	• Sequence of raw hartmann images • Spot shift map • Wavefront aberration map (3D plot, 2D projection, synthesized interferogram, up to 55 Zernike polynomials) • Defocus/Curvature/Astigmatism • PSF (point spread function) • MTF (modulation transfer function) • Strehl ratio • M2 factor • Gauss-Hermite modes • Turbulence parameters C_n^2, R_0

**** Better accuracy available upon request***

MECHANICAL DIMENSIONS



SPECTRAL RESPONSIVITY



phones
+7 (495) 792-79-76
+7 (499) 256-73-35

fax
+7 (499) 259-27-84

www
www.visionica.biz

Part Number:
VC.SHAH-5-0.125-2.4-30