



WaveFront Sensor ShaH-021000

- The ShaH-021000 - 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)	2.5 mm
Spatial resolution	0.25 mm
Number of points for analysis	90
Maximum tilt mode	±0.05 rad
Minimum measured curvature	±0.02 m
Repeatability RMS	1.5 nm
Absolute measurement accuracy RMS	$\lambda/100$ *
Relative measurement accuracy RMS (At maximum angular source size <5 mrad)	$\lambda/400$
Relative measurement accuracy P-V (Within 90% of input aperture)	$\lambda/100$
Tilt measurement sensitivity	2.2 μ rad
Curvature measurement sensitivity	280 m
Acquisition frequency	1076 Hz
Processing frequency	up to 1076 Hz
Hartmann image acquisition	10 bit
Working wavelength	400-1000 nm
Calibrated waveband	200 nm
Maximal exposure (at wavelength 700 nm)	0.08 nJ/cm ²
Working temperature	+10-+40 °C
Weight	240 g
Dimensions (LxHxW)	75x75x52 mm

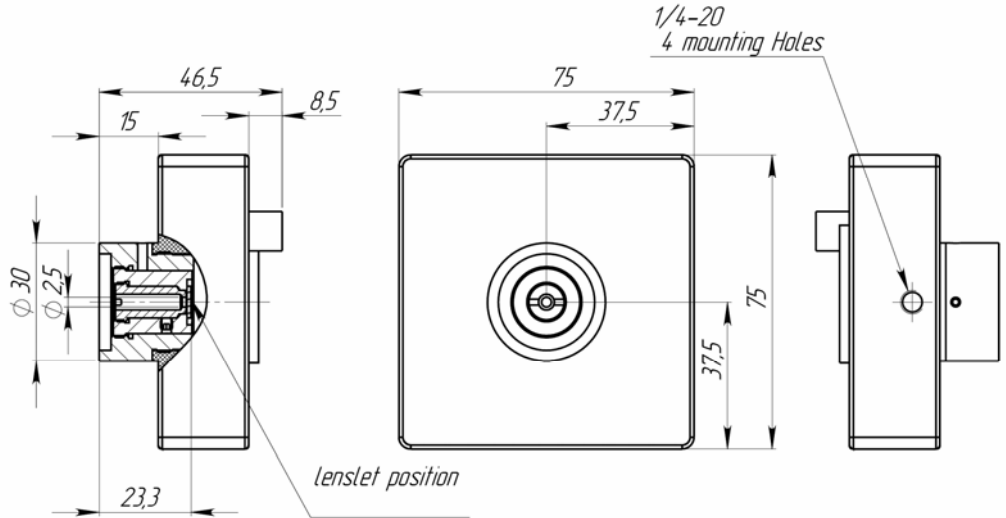


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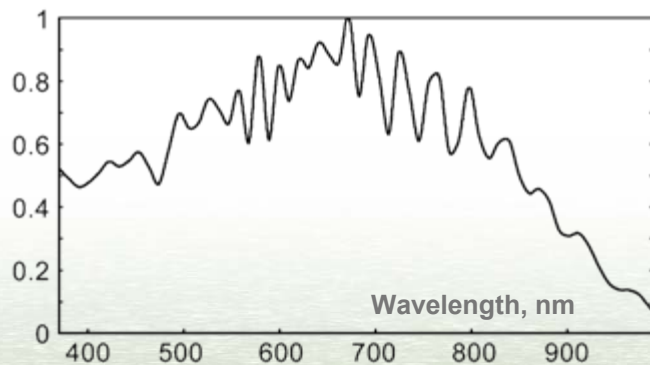
TECHNICAL SPECIFICATIONS	
CameraLink Cable	MDR Male-to-Male
Operating system	Windows 2000/XP/Vista
Output data	<ul style="list-style-type: none"> • Sequence of raw hartmann images • Spot shift map • Wavefront aberration map (3D plot, 2D projection, synthesized interferogram, up to 55 Zernike polynomials)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

* Better accuracy available upon request

MECHANICAL DIMENSIONS



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