

- The ShaH-06120 - 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-06120

TECHNICAL SPECIFICATIONS. Modification A (B)

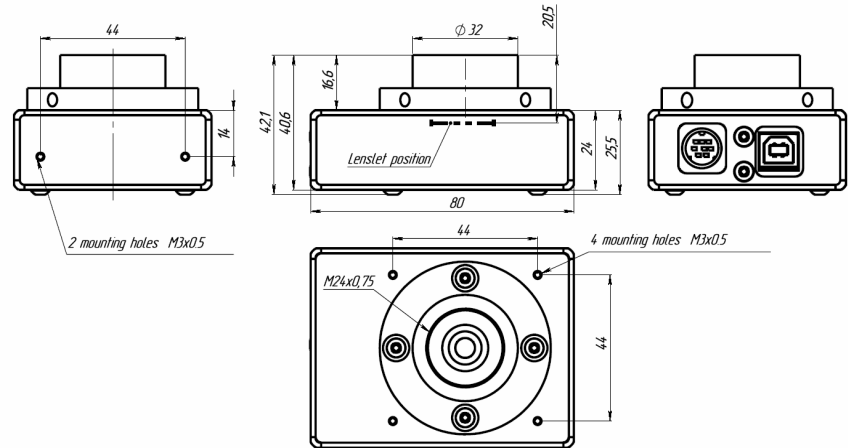
Aperture diameter	6 mm
Spatial resolution	150 (500) μm
Number of points for analysis	1500 (140)
Maximum tilt normal/extended mode	$\pm 25/75$ ($\pm 50/150$) mrad
Minimum curvature	± 0.12 (± 0.06) m
Repeatability RMS	0.4 (0.8) nm
Absolute accuracy RMS	$\lambda/100$ *
Relative accuracy RMS (at maximum angular source size <10 (3) mrad)	$\lambda/1800$ ($\lambda/900$)
Relative measurement accuracy P-V (within 90% of input aperture)	$\lambda/450$ ($\lambda/220$)
Tilt measurement sensitivity	0.3 (0.5) μrad
Curvature measurement sensitivity	5.8 (3) km
Acquisition frequency	120 Hz
Frame processing time	less 15 ms
Hartmann image acquisition	8/10 bit
Working wavelength	350-1100 nm
Calibrated waveband	400 nm
Maximal exposure (at wavelength 720 nm)	13 (0.3) nJ/cm^2
Working temperature	from 0 to +40 °C
Weight	250 g
Dimensions	80x60x40 mm

* Better accuracy available upon request



Interface/power supply	IEEE1394
Synchronization connector	Mini DIN
Operating system	Windows 7/8/10/11 (32/64-bit), Linux
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

