



- The ShaH-1035 - 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-1035

TECHNICAL SPECIFICATIONS

Aperture diameter	10 mm
Spatial resolution	300 μ m
Number of points for analysis	1000
Maximum tilt normal/extended mode	\pm 35/100 mrad
Minimum curvature	\pm 0.13 m
Repeatability RMS	1 nm
Absolute accuracy RMS	λ /100 *
Relative accuracy RMS (at maximum angular source size <5 mrad)	λ /650
Relative measurement accuracy P-V (within 90% of input aperture)	λ /160
Tilt measurement sensitivity	0.4 μ rad
Curvature measurement sensitivity	6 km
Acquisition frequency	35 Hz
Processing time per frame	5 μ s
Hartmann image acquisition	10 bit
Working wavelength	300 (170 **)-1000 nm
Calibrated waveband	200 nm
Maximal exposure (at wavelength 650 nm)	0.03 nJ/cm ²
Working temperature	from 0 to +50 °C
Weight	250 g
Dimensions	50x50x80 mm

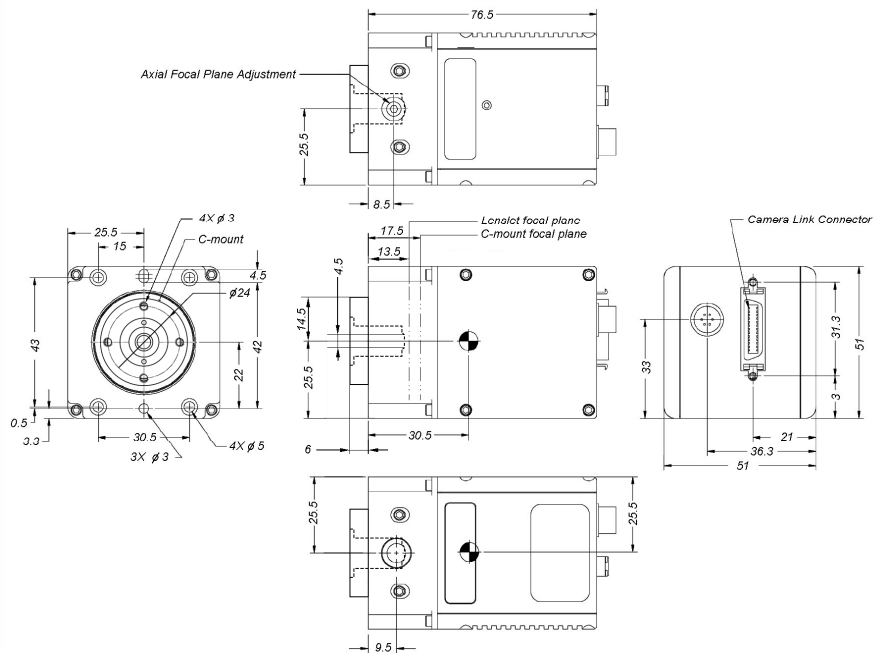
* Better accuracy available upon request

** with UV Options



Interface/power supply	IEEE1394
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

