HASO
LIFT 680

The Optical Metrology
Best-in-class

High spatial resolution
Alignment-free
Wavefront Sensor

compatible

imagine optic

HASO LIFT 680

For HASO LIFT 680, Imagine Optic merged the reliability and accuracy of a Shack-Hartmann wavefront sensor with LIFT's high resolution.

This high-end device features the new SpotTracker technology. It provides absolute wavefront and tilt information, eliminating alignment requirements.

This instrument is compatible with the Optical Engineer Companion metrology system.

APPLICATIONS

Successfully used in the most demanding applications in optical metrology, industrial control, microscopy, and laser diagnostics, the HASO LIFT 680 enables you to :

+ Characterize complex optics, including meta-surface and freeform optics
+ Quantify laser impact (LIDT)
+ Perform surface characterization on high and middle frequencies mirrors
+ Predict the optical system's performance in terms of focalization capability or imaging quality
+ Quantify the effects of temperature and gravity on the system's performance
+ Pilot a wavefront corrector to change the system's aberrations

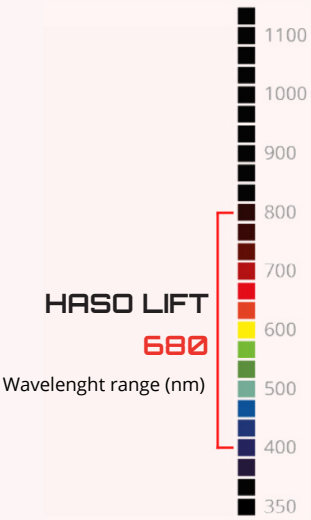
FEATURES

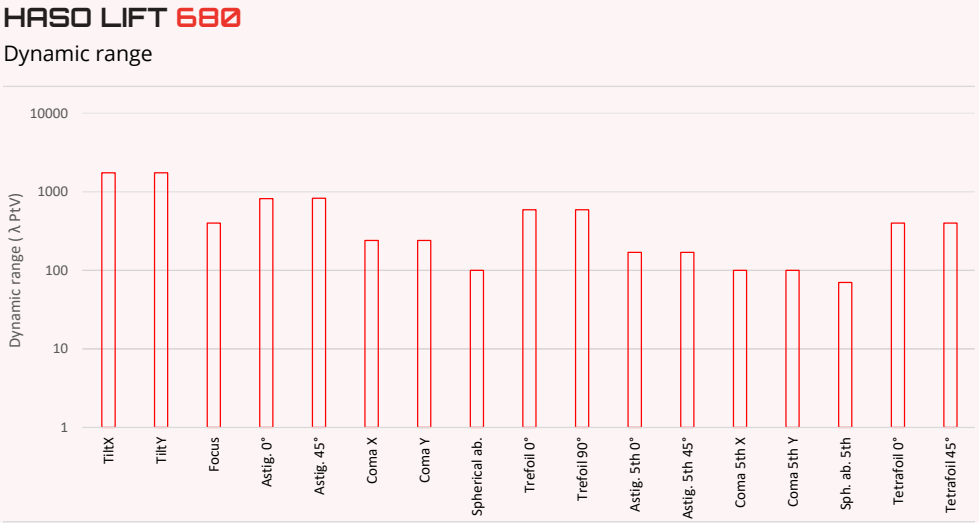
HASO LIFT 680 enables you to perform multiple functions by combining :

+ A spatial resolution of 680 x 504, allowing characterization over several hundreds of Zernike polynomials
+ An accuracy of λ/100 rms permitting small defects detection
+ A dynamic range superior to 1000 λ for direct wavefront acquisition of converging and diverging beams
+ Our patented technology for simultaneous and independent

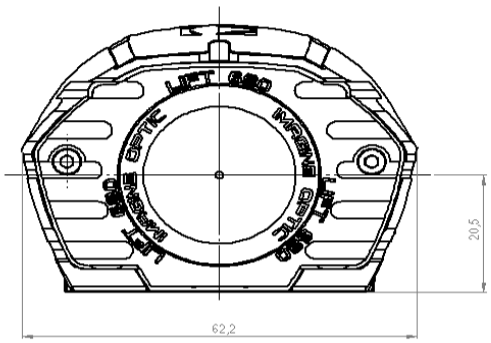
SPECIFICATIONS

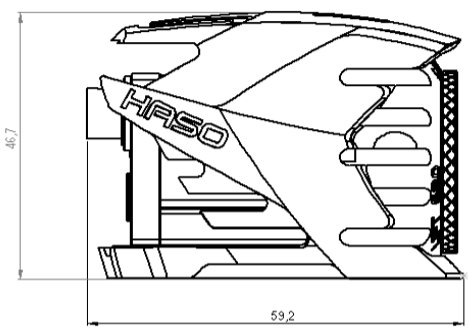
OPERATING SPECS	
Aperture dimension	13.77 x 10.22 mm²
Phase points resolution	680 x 504
Number of microlenses	170 x 126
Maximum acquisition frequency	30 Hz
Calibrated wavelength range	400- 800 nm
Mimimum power	0.7 nW
External trigger TTL signal	
OPERATING SYSTEM	**Windows 10**
OPTICAL SPECS	
Repeatability	< λ/200 rms
Absolute wavefront measurement accuracy	λ/100 or 6 nm rms
Spatial sampling	~ 20 µm
Tilt dynamics range	> ± 3°
Focus dynamics range	± 0.010 m to ± ∞
MISC	
Dimension/weight for USB version	47 x 60 x 62 mm3 / 200g
Working temperature	15 - 30 °C
Interface / Power consumption	USB 3.0 / 3.6W





DIMENSIONS (mm)



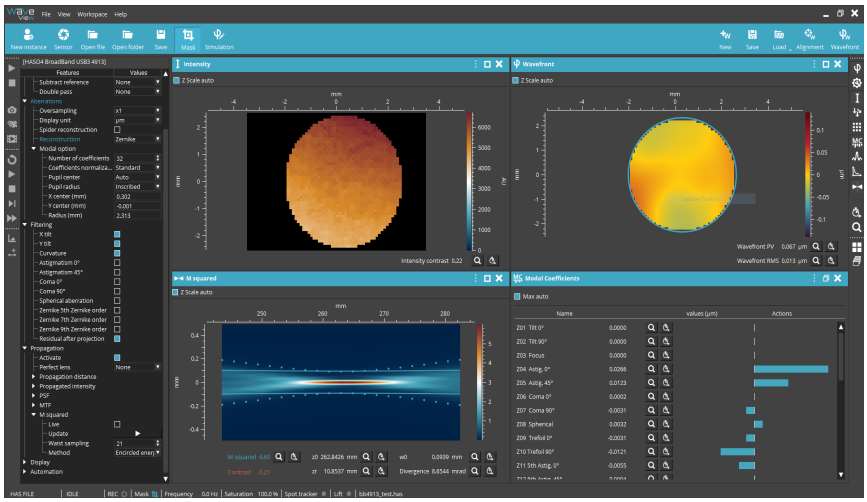


SOFTWARE

WAVEVIEW 4.3
Metrology Software

WaveView is the most advanced wavefront measurement and analysis software.
It offers more than 150 features and tools optimized for a wide range of highly demanding applications.

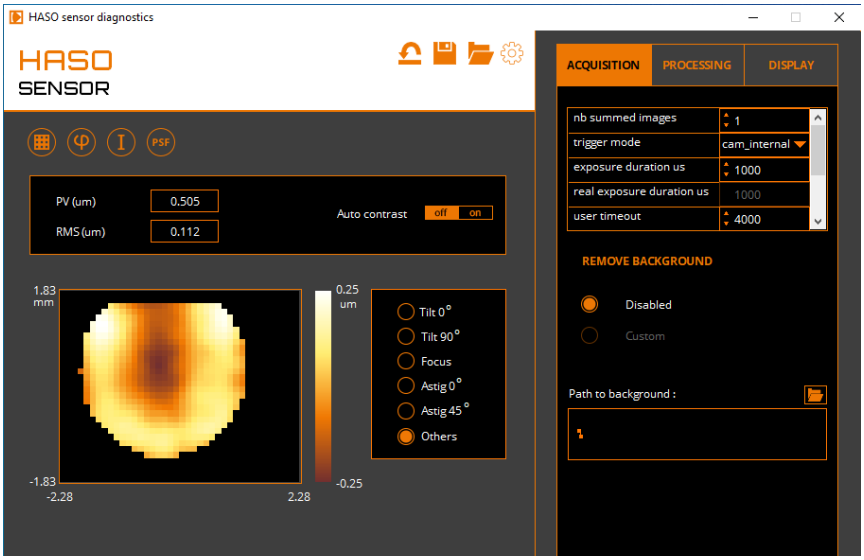
+ Extensions for PSF, MTF, Msquare and Strehl ratio
+ Optional SDK in C/C++, LabVIEW and Python
+ Windows10 64 bits compatible



WAVETUNE 4.3
Adaptive Optics Software

WaveTune is a unique application that seamlessly combines wavefront measurement and correction features with extensive instrument diagnostics.
It is perfectly adapted to our HASO wavefront sensors, ILAO Star, and MIRAO deformable mirrors, as well as to a wide range of active components.

+ Compatibility with many deformable mirrors
+ Optional SDK in C/C++, LabVIEW and Python



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