



HASO

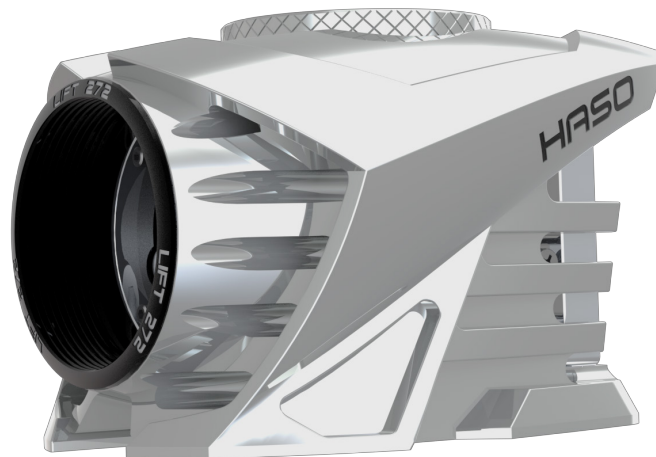
LIFT 272

Wavefront sensor
The Polymath

Ultra-high spatial resolution
High accuracy
Alignment-free



 compatible



HASO LIFT 272 +

The HASO LIFT 272 provides ultra-high resolution and broadband for maximum precision and versatility.

This generation features the new SpotTracker™ technology. It provides absolute wavefront and tilt information, eliminating alignment requirements for faster and easier implementation.



Compatible with the **Optical Engineer Companion** modular system: easily combine the accessories you need.

APPLICATIONS

Successfully used in the most demanding applications in optical metrology, microscopy, and laser diagnostics, the HASO LIFT 272 performs multiple functions :

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

FEATURES

The HASO LIFT 272 enables you to perform multiple functions by combining :

- + Ultra-high spatial resolution of 272 x 200, allowing characterization over several hundreds of Zernike polynomials
- + Accuracy of $\lambda/100$ RMS permitting small defects detection
- + Dynamic range superior to 1000λ for direct wavefront acquisition of converging and diverging beams



SPECIFICATIONS*

OPERATING SPECS

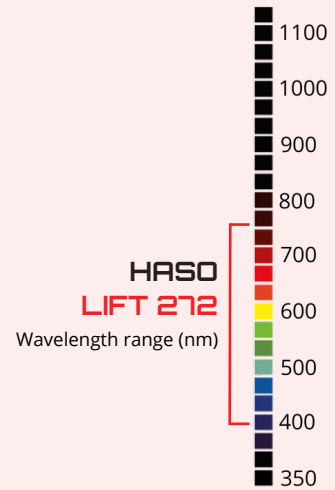
Aperture dimension	7.0 x 5.2 mm ²
Phase points resolution	272 x 200
Number of microlenses	68 x 50
Maximum acquisition frequency	58 Hz (USB 3.0) or 30 Hz (with GigE converter)
Calibrated wavelength range	400 - 750 nm
Minimum power	0.15 nW
External trigger	TTL signal
Operating system	Windows 10 & 11

OPTICAL SPECS

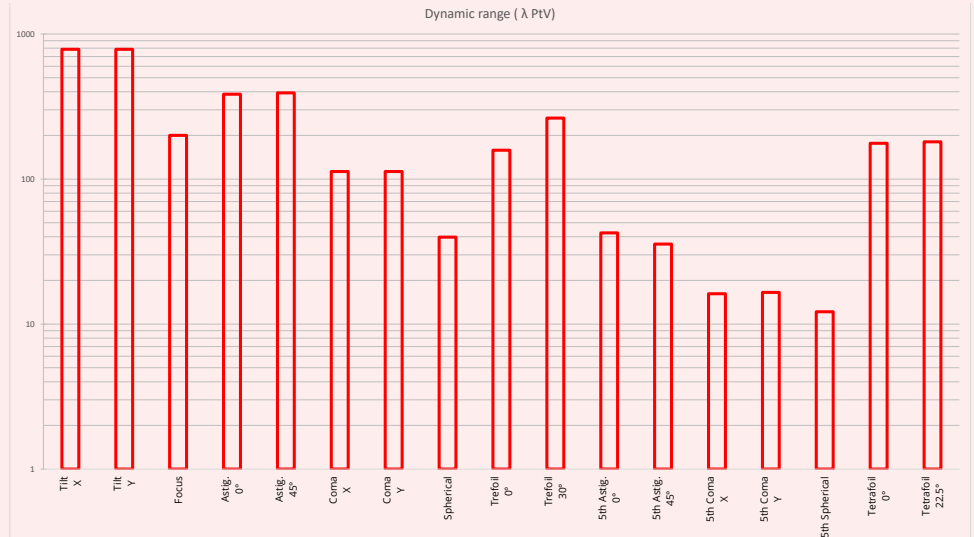
Repeatability	< $\lambda/200$ RMS
Absolute wavefront measurement accuracy	$\lambda/100$ or 6 nm RMS
Spatial sampling	~ 100 μ m
Local radius of curvature dynamic range	± 0.010 m to $\pm \infty$

MISC

Dimension (Height x Width x Length)	42 x 47 x 60 mm ³ (USB 3.0)
Weight for USB version	185 g
Working temperature	15 - 30 °C
Interface	USB 3.0 or optional GigE converter
Power consumption	3.6 W

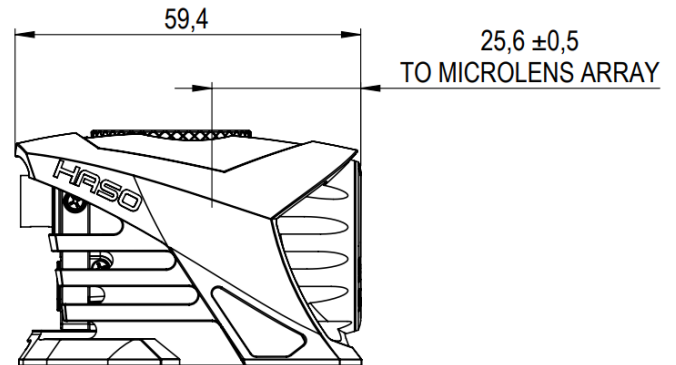
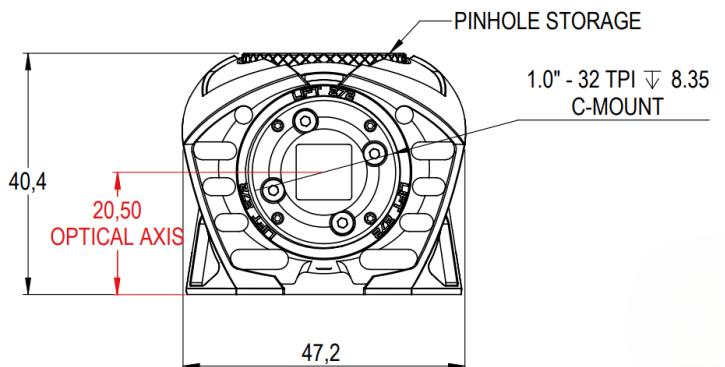


HASO LIFT 272 Dynamic range at $\lambda = 635$ nm



*Subject to changes without further notice

DIMENSIONS** (mm)



**USB 3.0 model

SOFTWARE

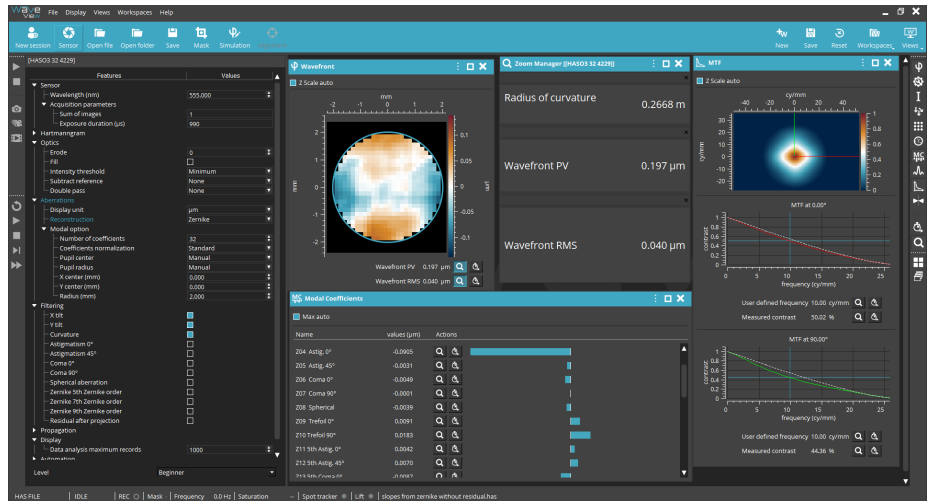
WAVEVIEW™ Metrology Software

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.

Options :

- + Extensions for PSF, MTF, M² and Strehl ratio
- + Optional SDK in C/C++, LabVIEW and Python



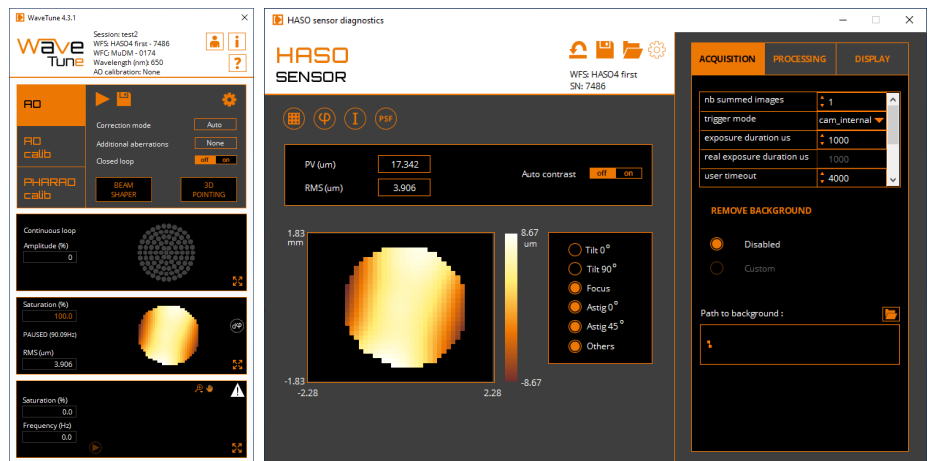
WAVETUNE™ Adaptive Optics Software

WAVETUNE™ is a unique software that seamlessly combines wavefront measurement and correction features with extensive instrument diagnostics.

It is perfectly adapted to our HASO wavefront sensors, ILAO STAR, MIRAO and mu-DM deformable mirrors, as well as to a wide range of active components.

Options :

- + Optional SDK in C/C++, LabVIEW and Python



CONTACT US

Imagine Optic Headquarters
 18, rue Charles de Gaulle
 91400 ORSAY · France
 Phone +33 (0)1 64 86 15 60
 sales@imagine-optic.com
 www.imagine-optic.com

