

HASO

Wavefront sensor
The Polymath

Ultra-high spatial resolution High accuracy Alignment-free







HASO LIFT 272 $\,+\,$

The HASO LIFT 272
provides ultrahigh 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

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 $1000\,\lambda$ for direct wavefront acquisition of converging and diverging beams



SPECIFICATIONS

OPERATING SPECS

7.0 x 5.2 mm² Aperture dimension Phase points resolution 272 x 200 68 x 50 Number of microlenses Maximum acquisition frequency 20 Hz Calibrated wavelength range 400 - 800 nm Minimum power 0.15 nW External trigger TTL signal Operating system Windows 10

OPTICAL SPECS

Repeatability < λ/200 RMS $\lambda/100$ or 6 nm RMS Absolute wavefront measurement accuracy Spatial sampling $\sim 105 \, \mu m$ Tilt dynamic range > ± 3°

Focus dynamic range

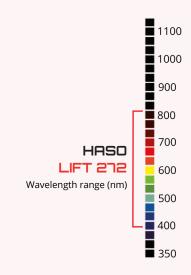
MISC

Dimension (Height x Width x Length) Weight for USB version Working temperature Interface Power consumption

42 x 47 x 60 mm³

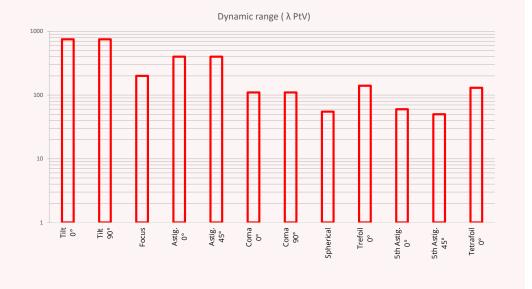
± 0.010 m to ± ∞

185 g 15 - 30 °C USB 3.0 3.6 W

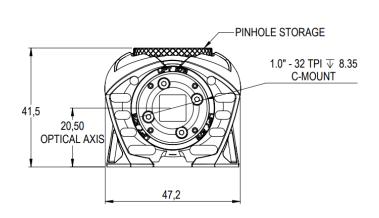


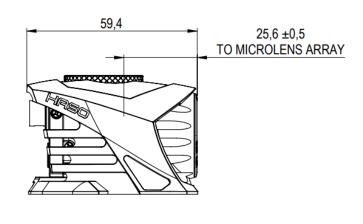
HASO LIFT 272

Dynamic range



DIMENSIONS (mm)





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:

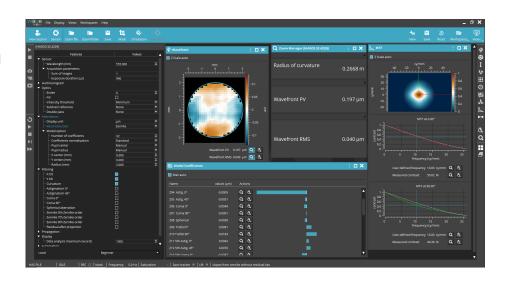
- + Extensions for PSF, MTF and Strehl ratio
- + Optional SDK in C/C++, LabVIEW and Python

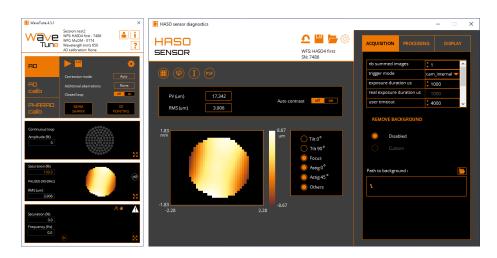
WAVETUNE™ Adaptive Optics Software

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

