

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 Absolute wavefront measurement accuracy Spatial sampling Tilt dynamic range

Focus dynamic range

MISC

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

Power consumption

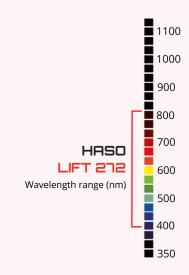
± 0.010 m to ± ∞

< λ/200 RMS $\lambda/100$ or 6 nm RMS

 $\sim 105 \, \mu m$

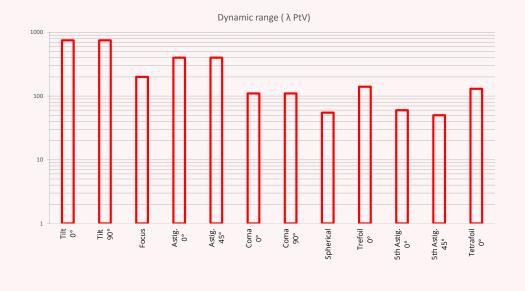
> ± 3°

42 x 47 x 60 mm³ 185 g 15 - 30 °C USB 3.0 3.6 W

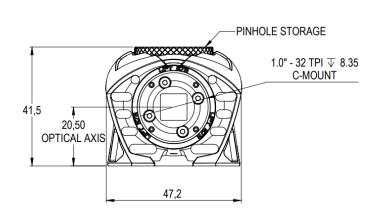


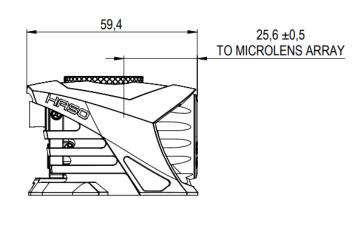
HASO LIFT 272

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:

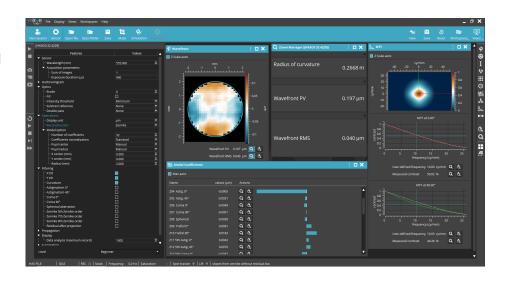
- + Extensions for PSF, MTF and Strehl ratio
- + Optional SDK in C/C++, LabVIEW and Python

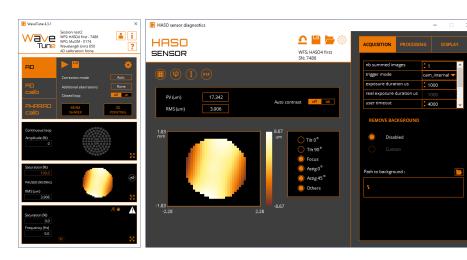
WAVETUNE™ Adaptive Optics Software

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

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