HASO
HXR

Wavefront sensor
The X

From 5 to 25 KeV
Live single-shot
High accuracy

imagine optic

HASO HXR

Imagine Optic's HASO HXR wavefront sensor is the only device of its kind that offers extreme precision and live measurement for today's advanced scientific research.

APPLICATIONS

Successfully used in many demanding applications, the HASO HXR performs multiple functions.
With it you can :
+ Obtain live measurement of the optical quality of your beamline at strategic positions such as after the monochromator, after an optics or a sample
+ Characterize fluctuations of the position of a focal point
+ Automatically align focusing optics systems (such as a Kirkpatrick-Baez system or toroidal mirrors)
+ Control active optics to optimize the focal spot
+ Retrieve intensity and phase information instantaneously. The system is adapted to biological imaging (nanoparticles in tissues or organs of small animals)

FEATURES

+ Single-shot, live visualization of the wavefront (no post-processing required)
+ High accuracy wavefront characterization (better than $\lambda/10$ RMS)
+ Multiple calibration options available
+ Characterization doesn't require to access to the focal point
+ Compact device, easy to use

SPECIFICATIONS*

OPERATING SPECS

Aperture dimension	Up to 3 X 3 mm^2
Number of sub-apertures dedicated for analysis	Up to 150 x 150
Exposure time range	100 ms - 900 ms
Typical flux needed at 1s exposure	10^{11} photon/s
Working photon energy (Wavelenght range)	5-25 keV (50 pm – 250 pm)
Operating system	Windows 10

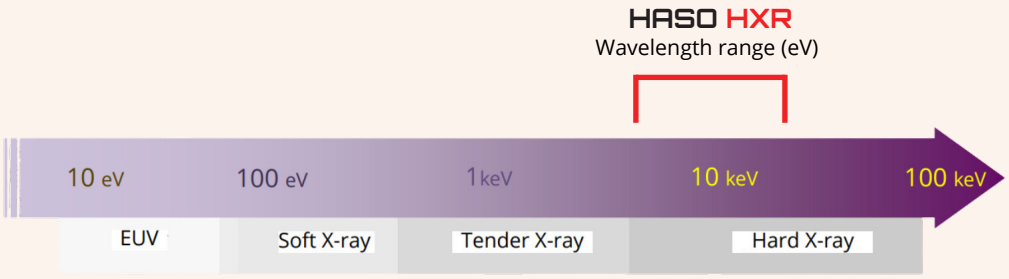
OPTICAL SPECS

Repeatability	λ/35 RMS
Absolute wavefront measurement accuracy	Better than λ/10 RMS
Spatial sampling	20 µm
T. measurment sensitivity	80 nrad RMS
Maximum beam divergence	1.5 mrad

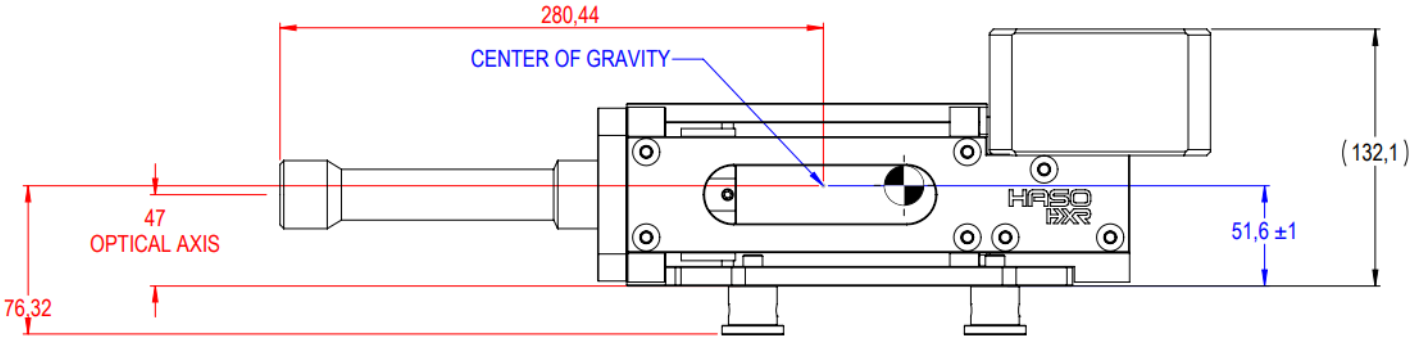
MISC

Dimensions (Height x Width x Length)	135 x 155 x 480 mm^3
Weight	4.5 Kg
Working temperature	15-30 °C
Interface	USB
Power consumption	12 VDC

*Subject to changes without further notice



DIMENSIONS (mm)



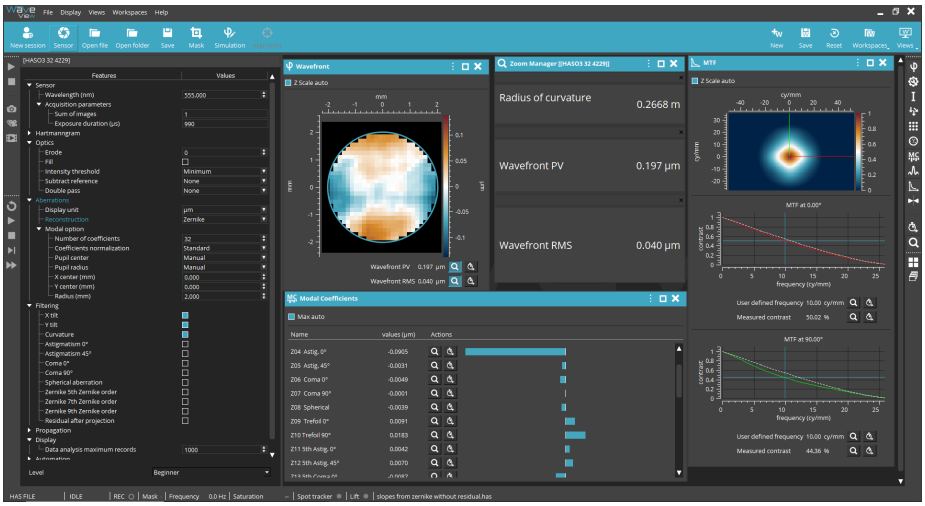
SOFTWARE

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, M² and Strehl ratio
+ Optional SDK in 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