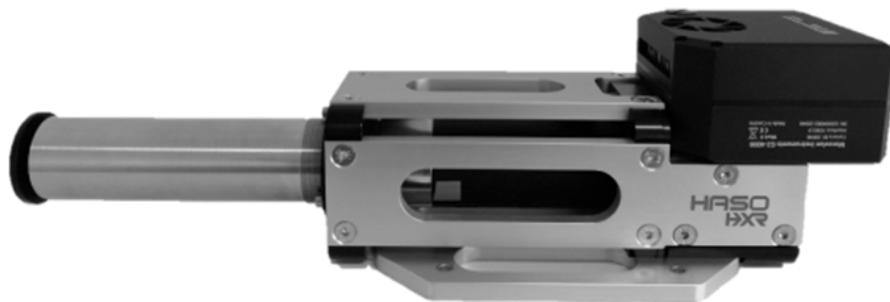


HASO HXR

Wavefront sensor The X

From 5 to 25 KeV
Live single-shot
High accuracy



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

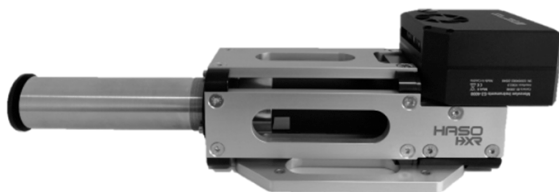
Successfully used in many demanding applications, the HASO HXR performs multiple functions.

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 (Wavelength range) | 5-25 keV (50 pm – 250 pm) |
| Operating system | Windows 10 |

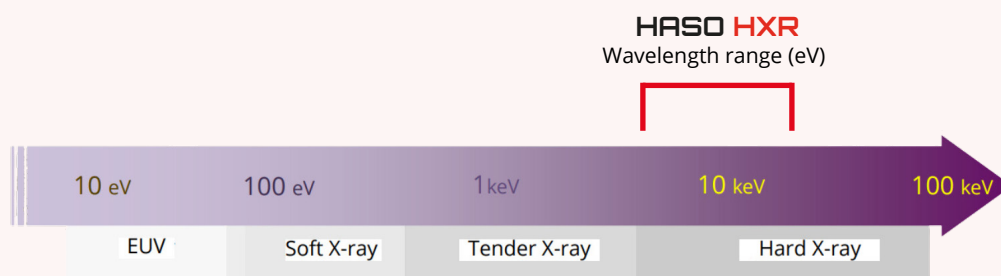
OPTICAL SPECS

| | |
|---|------------------------------|
| Repeatability | $\lambda/35$ RMS |
| Absolute wavefront measurement accuracy | Better than $\lambda/10$ RMS |
| Spatial sampling | 20 μ m |
| T. measurment sensitivity | 80 nrad RMS |
| Maximum beam divergence | 1.5 mrad |

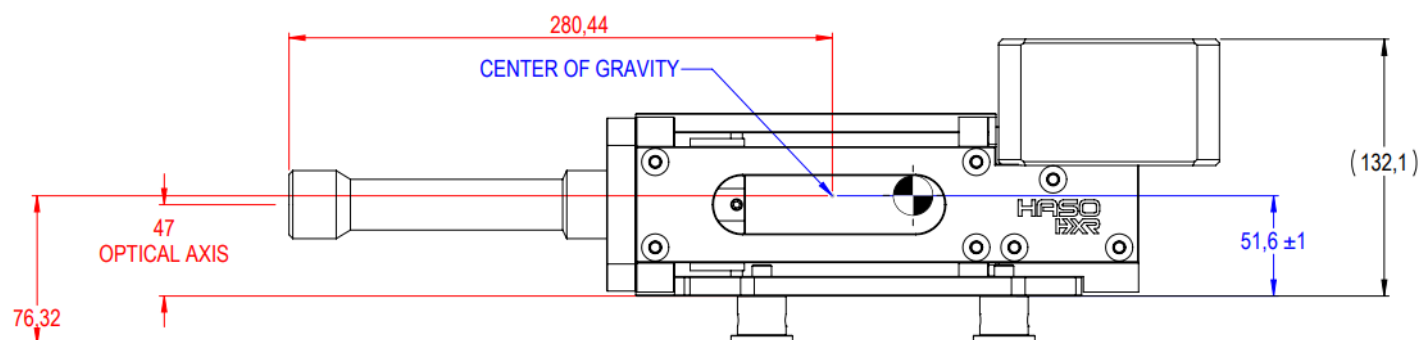
MISC

| | |
|--------------------------------------|---------------------------------|
| 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

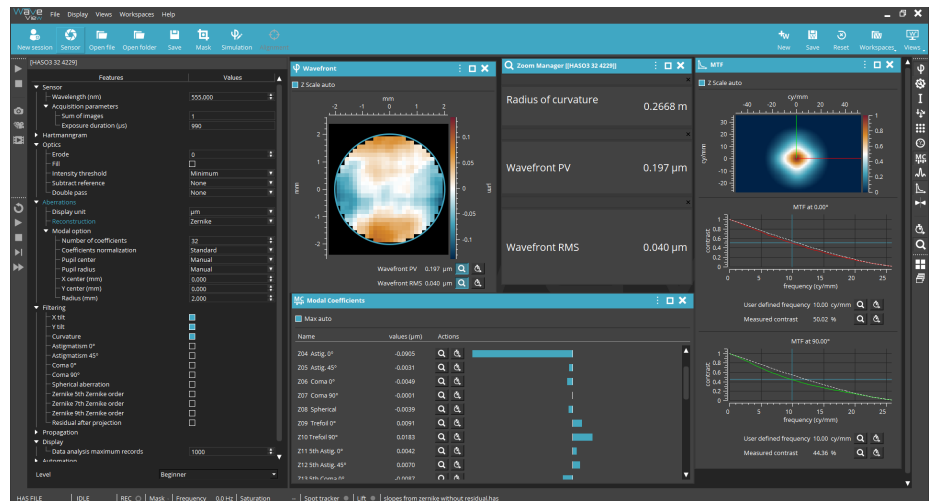
WAVEVIEW™ Metrology Software

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

