

0,2 s

Measurement time/lens*

157 x 157

Measurement spots*

7µm

Inspection resolution*

SHSInspect prio	
Technology	- Wavefront sensor and image processing technology - Measurement of contact lenses in air and in liquid
Functionality	- Measurement of sphere, cylinder, cylinder axis, prism, prism axis, add, power map, wave aberrations (Zernike) - Lens diameter & ellipticity - Toric mark detection ^a
Software license	SHSWorks PRO; SHSWorks autoCL; triple illumination (optional)
Wavelength refractive data	540 nm ± 10 nm
Sample stage	Static interface / manual y-stage / manual x-y-stage / motorised y-stage
Lens spherical power	– 35dpt ... +35dpt in air ^{b,g}
Lens cylinder power	Up to 10dpt in air ^c
Field of view	Refractive data: 8.5 mm ^d Lens image: 20 mm ^d
Lateral resolution	Refractive data: 91 x 91 measurement points 157 x 157 measurement points Lens image: 2 Mpix 9 Mpix
Power reproducibility	< 0.02 dpt (1 σ, as measured, lens moved) ^e
Power repeatability	< 0.002 dpt (1 σ, as measured, lens not moved) ^e
Power uncertainty	< 0.03 dpt ^e
Measurement duration	< 0.2 to 1 sec (data acquisition, evaluation ^f and display of results)
Dimensions / Weight	≈ 260 × 524 × 560 mm ³ (W×D×H) / 17 kg
Personal Computer	Included; Windows 10 LTSC 64bit (English or German)
Documentation	CE certificate, calibration certificate, user manual, etc.
Included accessories	- Tweezers and tools for system check and handling - Instrument cover

^a Typical marks implemented as a standard, specific mark types can be implemented upon request
^b For measurement in cuvette/saline solution this corresponds to a power range of min. – 100 ... +100 dpt (prescription power value), depends on refractive index of the lens
^c Maximum power in strongest and weakest meridian is as stated in “Lens spherical power”
^d ± 3 %,
^e executed with verification lenses at air
^f autoCL activated, Zernike reconstruction, refractive data evaluation
^g the device is calibrated at 4.5mm diameter
*depending on system configuration

Why Optocraft?

Optocraft has been developing and manufacturing Shack-Hartmann wavefront sensors since 2001. With decades of experience in optical measurement technology and design of optical systems, we constantly push the limits of this technology. Our systems can be found all over the world and cover even the most demanding applications. Our customers enjoy our dedicated and reliable support.

We love to be challenged, try us!



Contact us!
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sales@optocraft.de



Know your quality:
Fast | Accurate | Ergonomic | Multifunctional

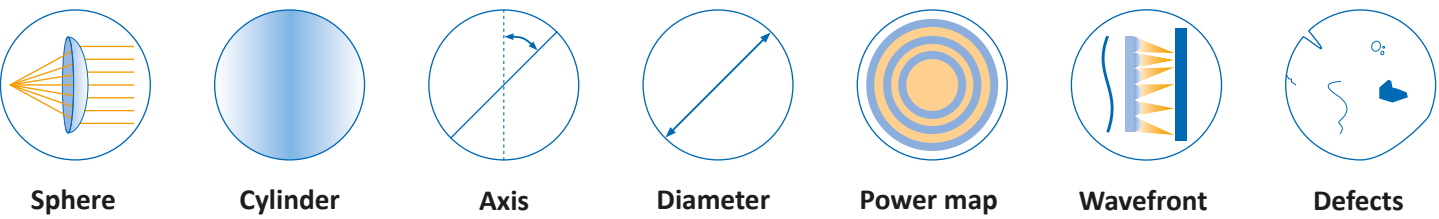


SHSInspect prio
Leading metrology for CL/IOL

Make lens quality your **priority!**

SHS**Inspect prio** is the leading metrology solution for the measurement of contact lenses and intra-ocular lenses in air and liquid. Its modular design allows you to configure it exactly to your needs and to expand it later as your requirements grow.

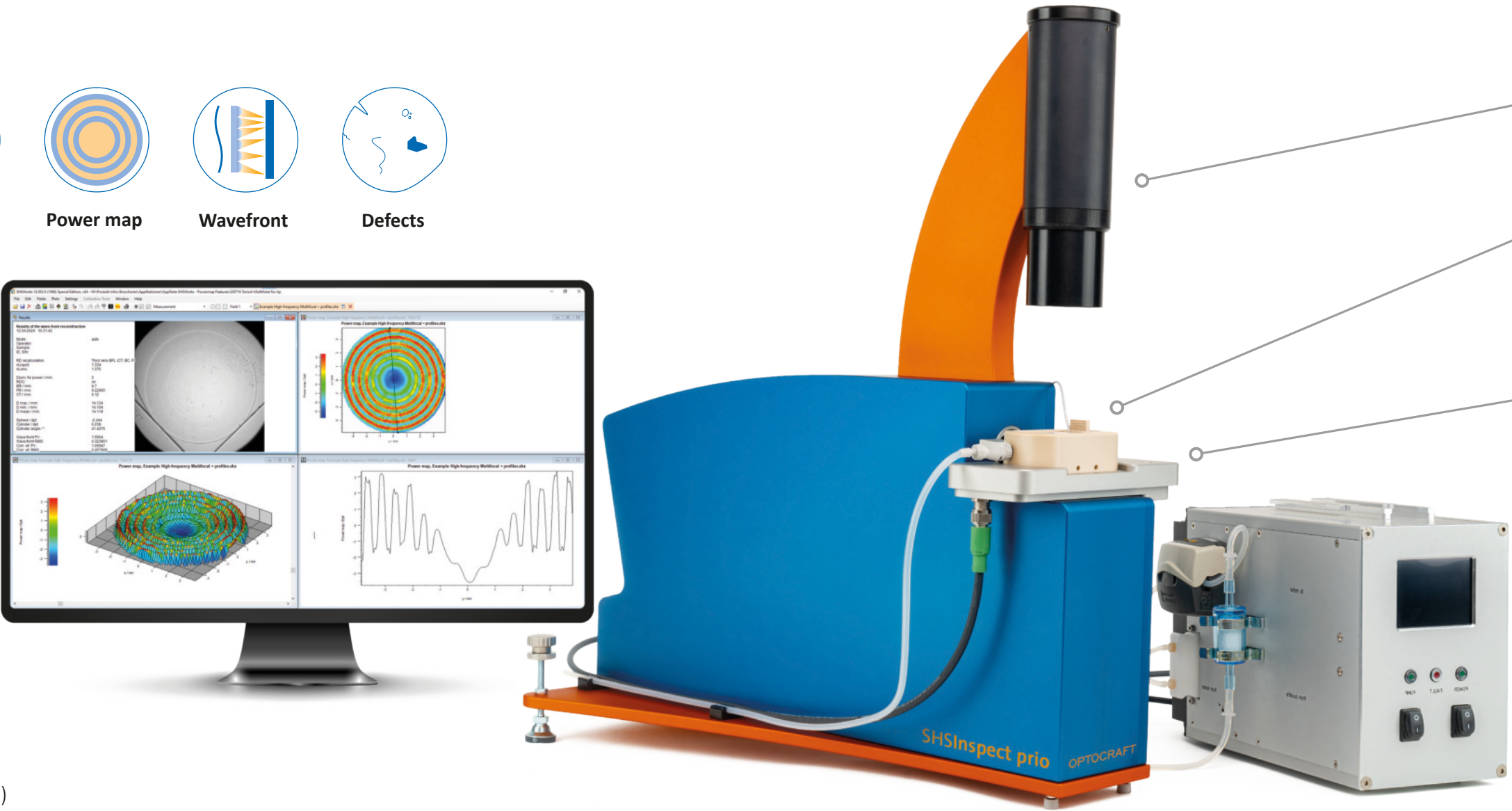
Functionality and key features



Why SHS**Inspect prio** ?

SHS**Inspect prio** offers a variety of amazing benefits and key features in a mature form factor. This makes your measurement process reliable and efficient.

- Excellent precision and accuracy
- High speed evaluation
- Ergonomic
- Robust
- Upgradable in the field
- Advanced mark detection
- Visualization of defects and optical zones (triple illumination)



The SHS**Inspect prio**

The SHS**Inspect prio** measures both contact lenses (RGP, soft, ortho-k, scleral, etc.) as well as intra-ocular lenses with spheric, toric, multifocal and wavefront guided designs.

Mix & Match

Choose the functionality you need:

Lateral Wavefront Resolution >

- ☐ 91 x 91
- ☐ 157 x 157

Vision Control Resolution >

- ☐ 2 MPix
- ☐ 9 MPix

Illumination¹ >

- ☐ Bright field
- ☐ Dark field
- ☐ Telecentric

Cuvette¹ >

- ☐ Object slide (dry CL / RGP)³
- ☐ Plano cuvette (wet CL / IOL)
- ☐ Open-top cuvette (wet CL)

Stage / Interface¹ >

- ☐ Static Interface
- ☐ Manual Y-stage
- ☐ Manual X-Y-stage
- ☐ Motorised Y-stage

Temperature Control / Pump^{1,2} >

- ☐ Filtered and temperature controlled pump

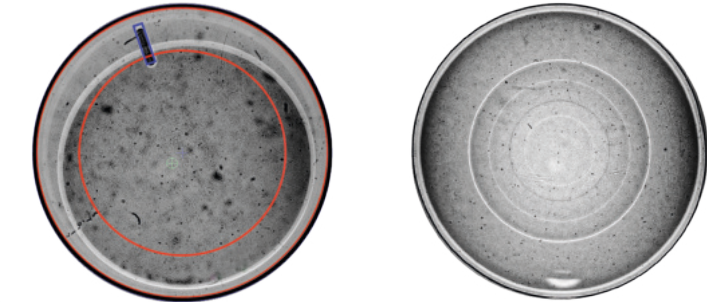
PC System / Software¹ >

- ☒ SHSWorks Pro
- ☒ autoCL software (automated lens detection)
- ☒ Desktop PC station
- ☐ FocalPoints integration (for CL-industry)
- ☐ Barcode reader



What makes the SHS**Inspect prio** stand out?

- **Single shot, high precision** measurement based on Optocraft's industry leading wavefront sensor technology
- **Robust and reliable:** minimum requirements on the operating environment
- **Modularity:** helps you to grow / grows with your needs



Advanced feature detection

With the **triple illumination** even the faintest features such as marks, zone boundaries, etc. can be visualized and detected.



The tried and tested **open-top cuvette**.

- Fastest lens handling in the market
- Temperature controlled
- Filtering of saline or DI-water

¹ upgradable in the field
² only in combination with open-top cuvette
³ shape depends on stage / interface