

**0,2 s**

Measurement time/lens\*

**157 x 157**

Measurement spots\*

**5µm**

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, axis, prism, prism axis, add, power map, wave aberrations (Zernike) - Lens diameter & ellipticity - Toric mark detection <sup>a</sup>
Software license	SHSWorks PRO; SHSWorks autoCL (optional); triple illumination (optional)
Wavelength refractive data	540 nm ± 10 nm
Sample stage	Motorised y-stage; manual ergonomic y-stage; static stage
Lens spherical power	- 35dpt ... +35dpt in air <sup>b</sup>
Lens cylinder power	Up to 10dpt in air <sup>c</sup>
Field of view	Refractive data: 8.5 mm <sup>d</sup> Lens image: 20 mm <sup>d</sup>
Lateral resolution	Refractive data: 91 x 91 measurement points 157 x 157 measurement points  Lens image: 2 Mpix 16 Mpix
Power reproducibility	< 0.02 dpt (1 σ, as measured, lens moved) <sup>e</sup>
Power repeatability	< 0.002 dpt (1 σ, as measured, lens not moved) <sup>e</sup>
Power uncertainty	< 0.03 dpt
Measurement duration	< 0.2 to 1 sec (data acquisition, evaluation <sup>f</sup> and display of results)
Dimensions / Weight	≈ 260 × 524 × 560 mm <sup>3</sup> (W×D×H) / 17 kg
Personal Computer	Included; Windows 10 LTSC 64bit (English or German)
Documentation	CE certificate, proprietary calibration certificate, user manual, etc.
Included accessories	- Tweezers and tools for system check and handling - Instrument cover

<sup>a</sup> Typical marks implemented as a standard, specific mark types can be implemented upon request

<sup>b</sup> 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

<sup>c</sup> Maximum power in strongest and weakest meridian is as stated in "Lens spherical power",

<sup>d</sup> ± 3 %,

<sup>e</sup> executed with verification lenses

<sup>f</sup> autoCL activated, Zernike reconstruction, refractive data evaluation

<sup>g</sup> the device is calibrated at 4.5mm diameter

\*up to

## 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.

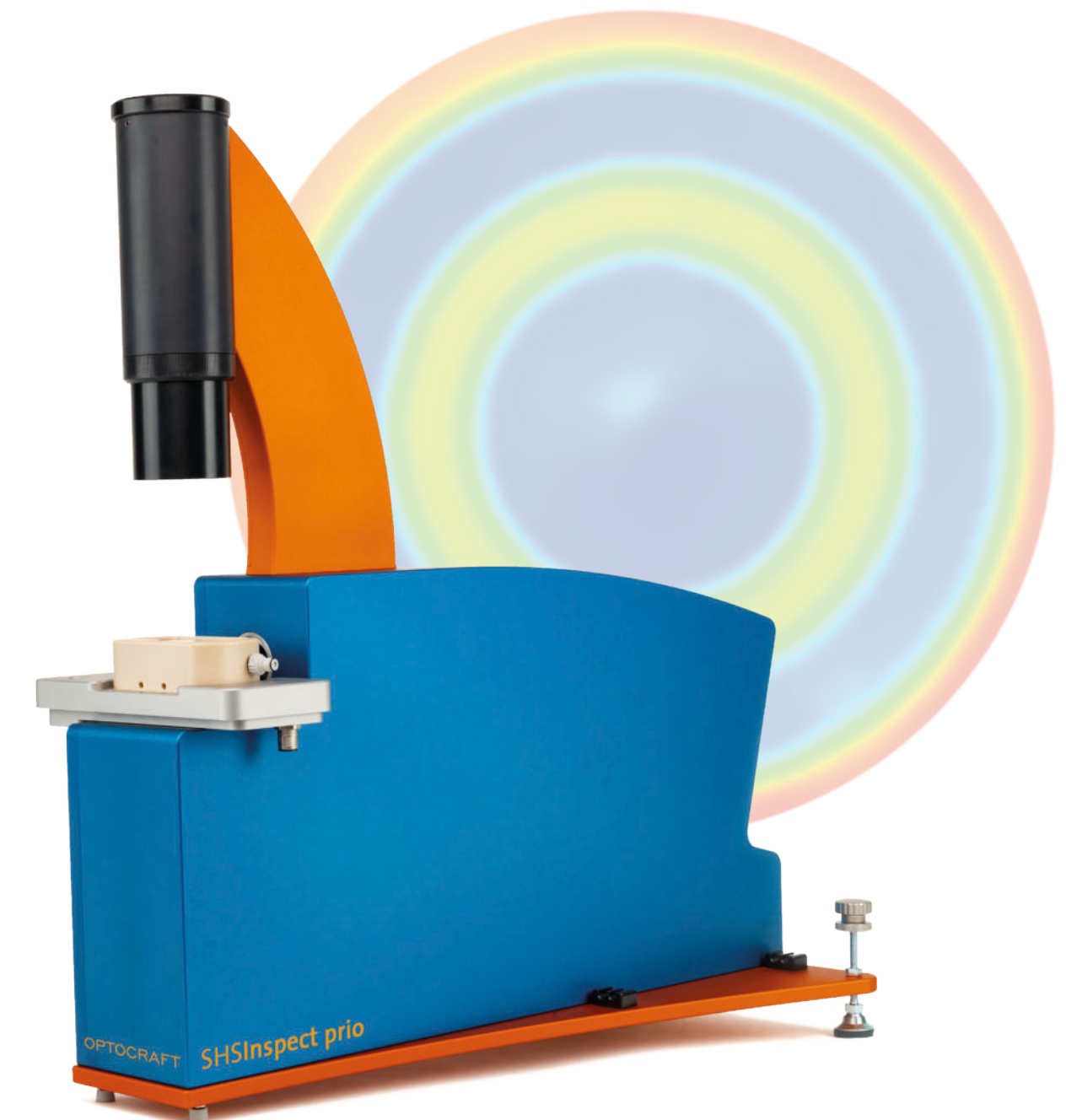
We love to be challenged - try us!



## Contact us!

Tel. +49 9131 691500

sales@optocraft.de



## Know your quality.

Optical metrology made by Optocraft

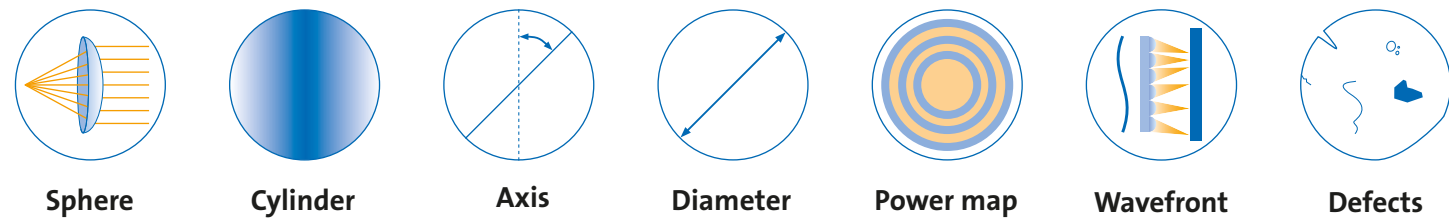


**SHSInspect prio**  
Metrology solutions for optics

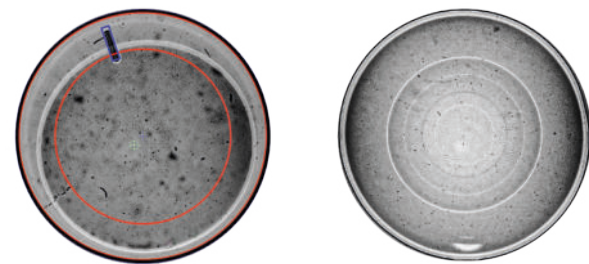
# Make lens quality your **priority!**

SHS**Inspect prio** is the powerful and economic standard solution for the measurement of refractive data, diameter and imaging quality of contact lenses in air and in liquid. Its modular design allows you to configure it exactly to your needs.

## Functionality and key features



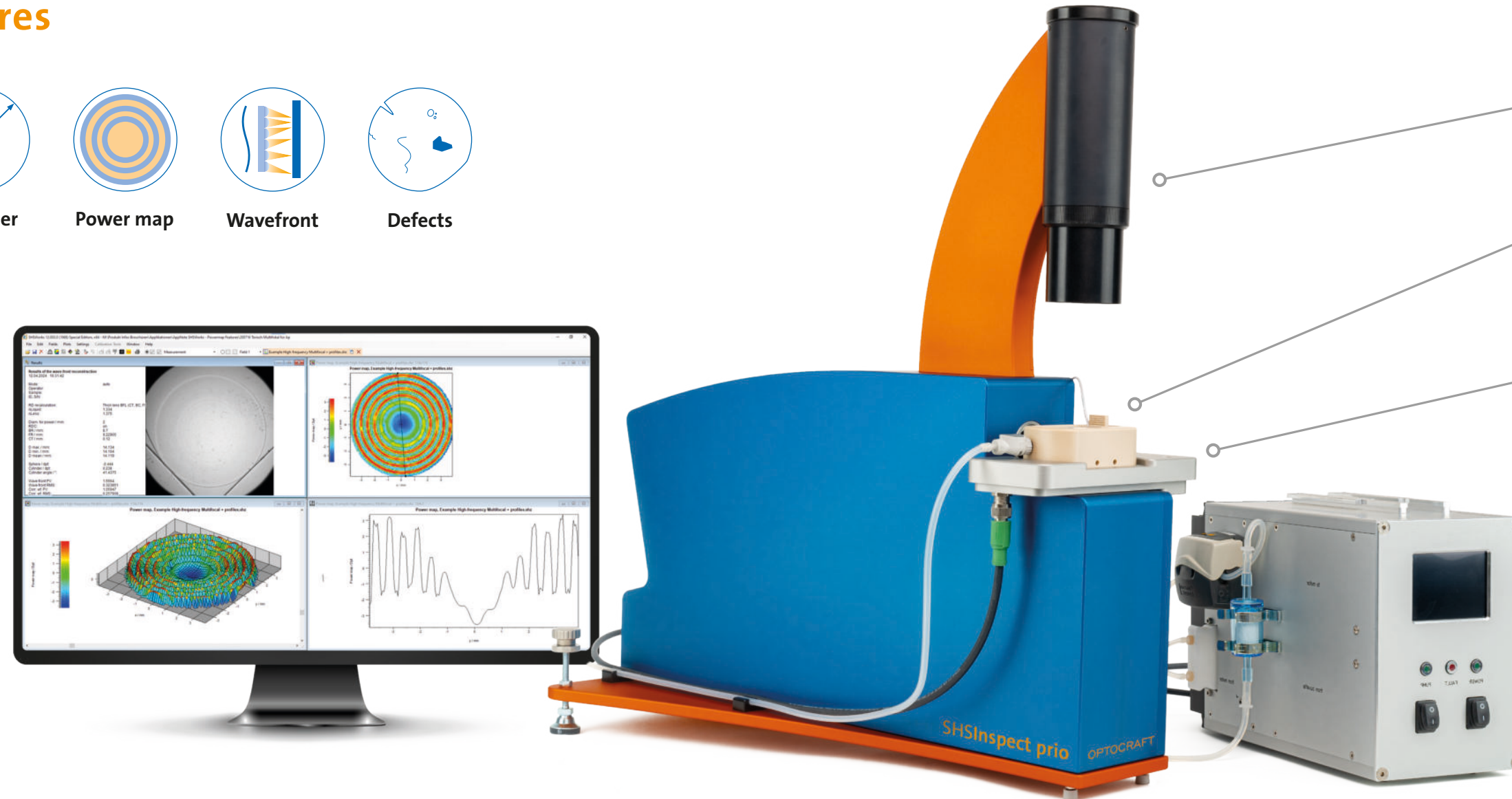
- Excellent precision and accuracy
- High speed evaluation
- Ergonomic
- Robust
- Upgradable in the field
- Triple illumination setup
- Defect visualisation



- Advanced lens mark detection
- Visualization of defects and optical zones with the triple illumination setup.

# The SHS**Inspect prio**

The modular system for RGP, ortho-k, scleral, soft contact lenses and 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
- 16 MPix

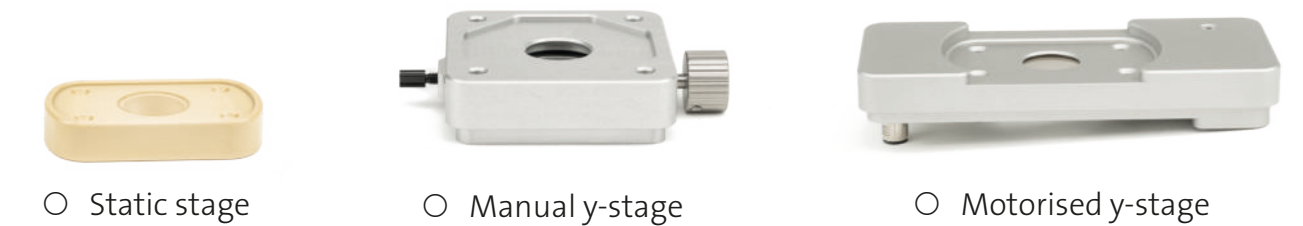
### Illumination<sup>1</sup> >

- Bright field
- Dark field
- Telecentric

### Cuvette<sup>1</sup> >

- Open-top cuvette
- Plano cuvette
- Object slide

### Stage / Interface<sup>1</sup> >



### Temperature Control / Pump<sup>1,2</sup> >

- Filtered and temperature controlled pump

### PC System / Software<sup>1</sup> >

- SHSWorks Pro
- autoCL software (automated lens detection)
- FocalPoints integration



## Why SHS**Inspect prio**?

- **Single shot, high precision** measurement based on Optocraft's industry leading wavefront sensor technology
- **Robust and reliable:** minimum requirements on the operating environment. Produces accurate results even when vibrations can not be eliminated
- **Modularity:** Helps you to grow / Grows with your needs

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

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

<sup>1</sup>upgradable in the field  
<sup>2</sup>only in combination with Open-top cuvette