

NEW



*High-Performance Digital Bench for Optical Industry*

## Smart\_OptiBench\_Pro

Automatic Optical Bench to check  
Optical Quality Performance & Refractive Powers

# About Smart\_OptiBench\_Pro

Optical Bench to check Optical Quality & Refractive Powers



*"Smart\_OptiBench\_Pro  
Automatically Checks  
Refractive Powers of  
Plano Lenses, Glasses,  
Goggles & Visors"*

## Automatic & Fast

Smart\_OptiBench\_Pro performs fast and **fully automatic tests** equivalent to **Telescope Method** to check **Optical Quality Performance and Refractive Powers** of Plano Lenses, Glasses with frame, Goggles & Visors in a short time.

This innovative System takes objective, **accurate and repeatable high precision measures** for any kind of Afocal Lenses, including Polarized Thermoformed and Mirrored Lenses, and it has an adjustable interpupillary distance.

## Easy & Productive

**Easily and Quickly Configurable Instrument**, thanks to the Dedicated Smart Tools interchangeable with each other, **suitable for Unskilled Operators use**. The **Smart\_HeadForm** tool for SunGlasses check is **compliance to ISO 18526-4** and available in three different models: Type 1-M (Standard) & 1-S, 2-M (Optional).

The Smart\_OptiBench\_Pro software **check the measurements complies with the main International Standards** and does not need input of T%. The intuitive and user-friendly graphical interface **shows a simple « Pass / Fail » lamp output indicator** avoiding operator's interpretation and evaluation.

## Accurate & Complete

Smart\_OptiBench\_Pro is the only device which can determine the **Optical Quality of the Lenses through a Sharpness Index based on MTF method** (Optional) and to be completely compliant with International Standards and European Regulation (EU) 2016/425.

Software & International Standards updates are available by Teleservice.

## Optional All-in-One PC



- Powerful All-in-One PC, 24" Full HD
- Monitor resolution 1920x1080 pixels
- Height adjustable & tilt swivel rotate position
- Genuine Windows 11 PRO 64-bit
- Pre-installed TeamViewer app Support

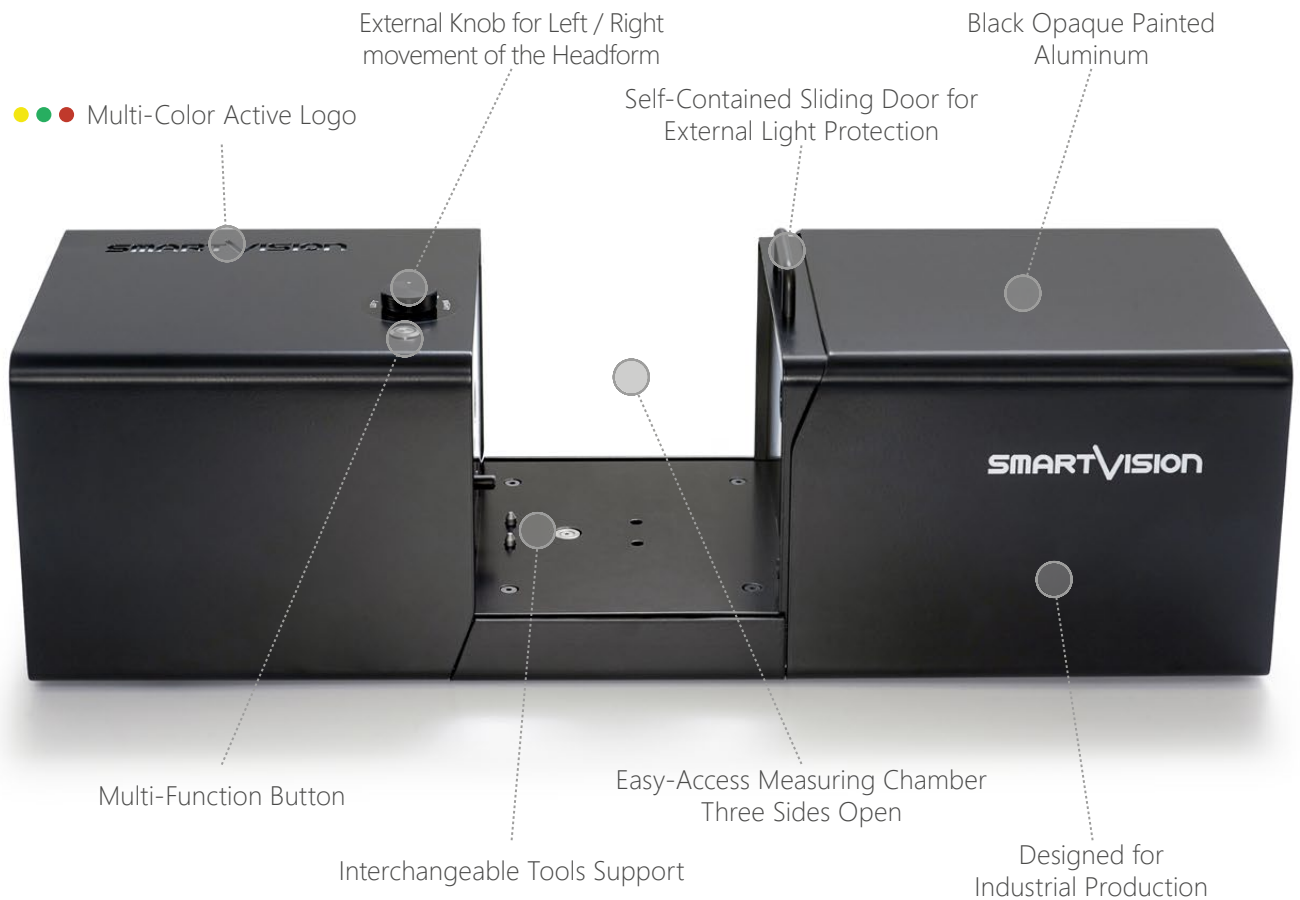
## Dedicated Software



- Easy-to-Use with an intuitive GUI
- Customizable setting parameters
- Full automatic data report
- Remotely managing Software Options
- Upgradability for future Standards
- Hardware License Key

# Hardware Features

Smart\_OptiBench\_Pro: Automatic Optical Bench



# Dedicated Smart Tools

Smart\_OptiBench\_Pro: Wide Range of Optional Fixing Tools



Lens\_Holder



Lens\_Holder\_Enhanced



Smart\_HeadForm

# Usage Configurations

Smart\_OptiBench\_Pro: Smart to Configure & Easy-to-Use

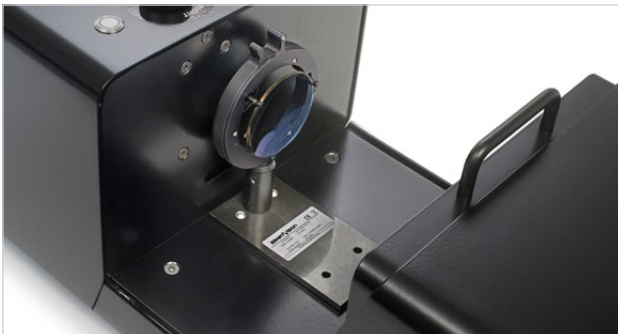


Right Lens Check



Left Lens Check

**SunGlasses Check:** Configuration with Smart\_HeadForm tool, to measure Optical Quality and Refractive Powers for SunGlasses. Moving stage with external knob to measure the both left and the right lens without opening door.



**SunLenses Check:** Lens\_Holder tool allow self-centering position of lenses with diameters up to 80 mm.



**SkiGoggles Check:** Configuration to measure Optical Quality and Refractive Powers for SkiGoggle



**Report:** Example of "Passed Test" for SunGlasses with check of the main International Standards enabled



**Report:** Example of printable report with Optical Power, International Standards and Optical Quality data



**Multi-Color Active Logo:** Immediate instrument's status feedback according to logo colors



**Designed for Industrial:** Fanless, Resistant, Compact, Ergonomic, Plug-and-Play & Easy-to-Use Device

# Optical Quality Option (OQC)

## Optical Bench to check Optical Quality & Refractive Powers

Smart\_OptiBench\_Pro is the first Optical Bench that, in addition to measuring Refractive Powers according to International Standards, carries out an **assessment of perception of the contrast** as required by new European Regulation Reg. (EU) 2016 / 425. Test Methods established by the current harmonized European Standards do not fully cover all the essential requirements described by new regulation.

*“Annex II – Essential health and safety requirements*

*Clause 3.9.1 Non-ionising radiation*

*PPE designed to prevent acute or chronic eye damage from sources of non-ionising radiation must be capable of absorbing or reflecting the majority of the energy radiated in the harmful wavelengths without unduly affecting the transmission of the innocuous part of the visible spectrum, the perception of contrasts and the ability to distinguish colours where required by the foreseeable conditions of use.”*

*31.3.2016 L 81/82 Official Journal of the European Union EN (Abstract)“*

Harmonized Standards guarantee the presumption of compliance with the EU Regulation only for the characteristics specifically considered by the Standard. Therefore, the producer must also prove that the essential requirements included in the Regulation have been satisfied, even if not included in the Standards.

## New Optical Quality Measurements

- Loss of Sharpness
- Loss of Contrast at 100 cycles/mm



Full Exportable Data Result

# Technical Specifications

## Smart\_OptiBench\_Pro: Automatic Optical Bench

<b>Main Functions</b>	<ul style="list-style-type: none"><li>• Test equivalent to Telescope Method</li><li>• Fully automatic test</li><li>• Objective and repeatable high precision measures for all Afocal Lenses</li><li>• Fast measuring time with full automatic data report</li><li>• No need of T% input (to be measured with a different machine)</li><li>• Reliable measure for Polarized, Thermoformed and Mirrored</li><li>• One unique instrument for both Adults and Kids Sunglasses</li><li>• Adjustable interpupillary distance</li><li>• Unique instrument for both SunGlasses and SunLenses (Combo Version)</li><li>• Complete set of accessories to measure Lenses, SunGlasses &amp; SkiGoggles of different sizes</li><li>• Fast and easy update of all International Standards through Teleservice</li><li>• Easy Maintenance</li><li>• Analysis speed according to required precision</li><li>• Measure Refractive Powers for Afocal Lenses:<ul style="list-style-type: none"><li>- Spherical</li><li>- Astigmatic</li><li>- Prismatic</li><li>- Spherical and Prismatic Balancing (for SunGlasses)</li></ul></li><li>• Compliance with main International Standards</li><li>• Quality of the lens check (<i>Optional</i>):<ul style="list-style-type: none"><li>- Sharpness Index: based on MTF (Modulation Transfer Function)</li></ul></li></ul>
<b>Measurement Uncertainty</b>	<ul style="list-style-type: none"><li>• Spherical power: +/- 0.01 D</li><li>• Astigmatic power: +/- 0.02 D</li><li>• Prismatic power: +/- 0.005 DP</li><li>• Balance prismatic power: +/- 0.01 DP</li></ul>
<b>Measurement Range</b>	<ul style="list-style-type: none"><li>• Spherical +/- 0.25 D</li><li>• Astigmatic: 0 – 0.25 D</li><li>• Prismatic:<ul style="list-style-type: none"><li>- Horizontal base IN: 0.25 DP</li><li>- Horizontal base OUT: 0.75 DP</li><li>- Vertical UP/Down: 0.25 DP</li></ul></li></ul>
<b>Dimensions (mm)</b>	890x300 H.280 (upper door handle included)
<b>Weight (kg)</b>	30 (excluding PC, tools and cables)
<b>Power Supply</b>	110-230 Vac   50-60 Hz
<b>Consumption</b>	3 A
<b>Communication Interface</b>	USB 3
<b>Case</b>	Black Opaque painted Aluminum
<b>Scan Type</b>	2 Meridians Scanner or 360°
<b>Measurement Area</b>	20 mm
<b>Software Interface</b>	Language: English
<b>Data Report</b>	pdf
<b>Data Export</b>	csv
<b>Optional PC Device</b>	Powerful All-in-One PC, 24" Full HD, Monitor resolution 1920x1080, Windows 11 PRO 64-bit USB Drive with Backup Software (bootable system startup) Pre-installed TeamViewer app Support

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