

State-of-the-art Spectrophotometer for Optical Industries

Smart_Color_Premium

Fast Accurate Industrial Spectrophotometer
for Lenses, SunGlasses & Masks Producers

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Spectrophotometer for Lenses, SunGlasses & Masks Producers



"Smart_Color_Premium allows automatic, objective, easy & fast Color differences and International Standard compliance tests"

Easy and Fast

Smart_Color_Premium is the advanced and unique evolution of spectrophotometers, specifically designed and **optimized for lenses** (SunGlasses, SunLenses, SkiGoggles, Masks, Visors, Dive & Swim Lenses) **quality controls**.

The innovative Smart_Premium_Suite software interface, designed by SmartVision, guarantees **measurements at a record speed** (just 1 second) and improve the usability by the operator.

Automatic and Productive

Smart_Color_Premium checks the **transmittance properties** according to all updated International Standards, the **Yellow Index** and the **Color Differences** compared to a master lens. New **Ophthalmic International Standard ISO 8980-3:2013** and **Aging** (Resistance to radiation) options are also available.

The instrument immediately shows a « **Pass / Fail** » **output**, with no contribution nor interpretation by the operator and no requirements of specific skills to perform the tests. State-of-the-art user features allow an **easier management of production quality controls**, with new optional advanced reports: Master Technical Report, Benchmark Report and Process Control Report.

Accurate and Smart

The **innovative improved design** of the device allows fast and firm grip of the lens and accurate positioning, suitable also for glasses with frame, masks, goggles, visors and safety glasses.

No need of mechanical movements nor to dismount or cut the lenses to fit the device. A **wide range of Software and Hardware Options** is available to perfectly suit every specific need.

Dedicated All-In-One PC



- Powerful All-In-One PC with Full-HD touchscreen
- Intuitive and user friendly software interface
- New T% graphic with color indication
- New Live 3D graphics to view the color space
- Continuous auto-calibration of the instrument

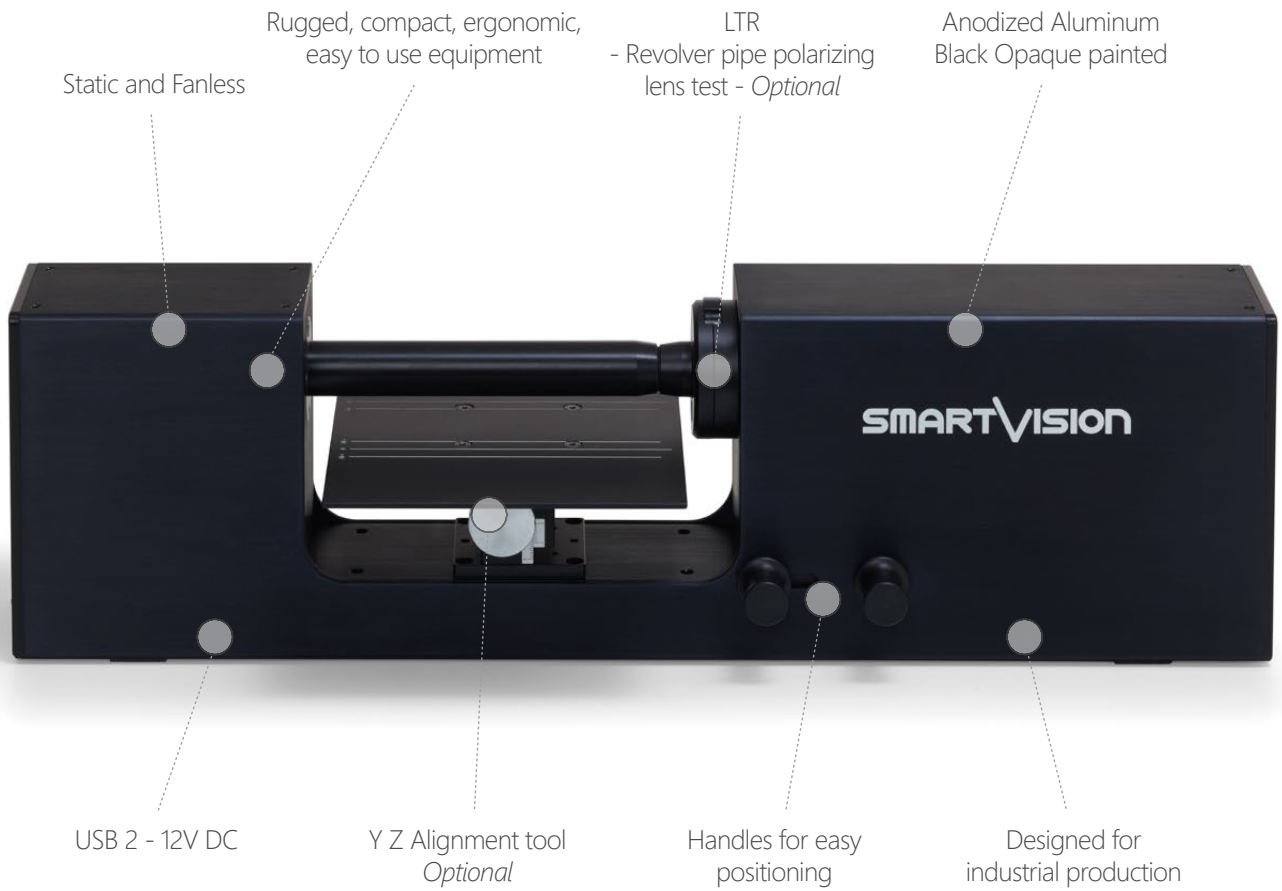
New Software features:



- Chinese Standard GB 39552-1 *Optional*
- International Standard ISO 16321-1 *Optional*
- International Standard ECE 22-06 *Optional*
- SkiGoggle mode with EN174 Standard check
- Yellowness Index check
- 3D color space visualization
- Extended User Management Feature
- Lamps Warm-up Dynamic Control
- Continuous auto-calibration
- Spectrum Stability Continuous Control
- Full Excel and PDF data reports

Smart Features

Hardware & Accessories



Lens Holder
(Available in 5 diameters)



Easy Alignment with the Y-Z
Smart Tool positioning



Smart Docking Platform
(For a best Vertical use)



LTR
for Light Transmittance Ratio Check



Laser
for Precise Point Mesuration



LSM Moduls Part
(Spare Light Module)

Smart Features Software



Solid Tint & Gradient

Lens conformity check for SunLenses and SkiGoggles



Photocromic (Optional)

Lens conformity check for SunLenses and SkiGoggles



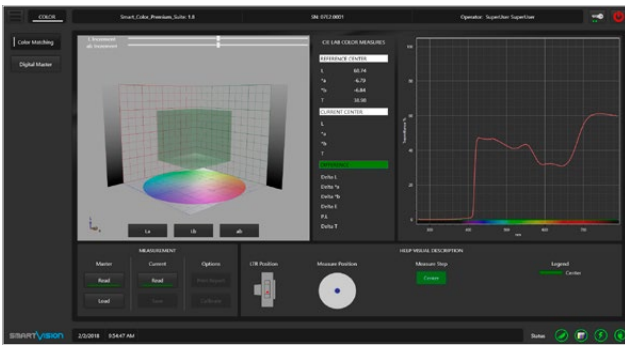
Polarizing (Optional)

Lens conformity check with LTR value for SunGlasses & SkiGoggles



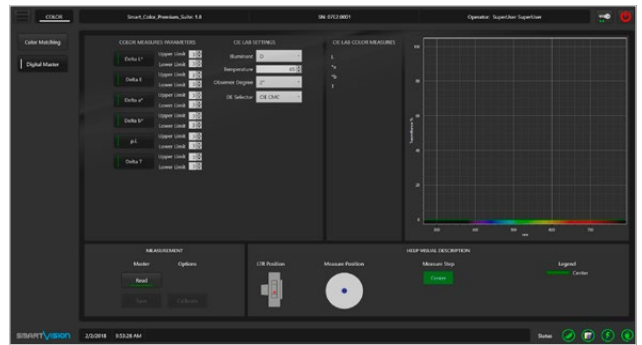
Sunglasses Imbalance Test (Optional)

Lens conformity check for mounted SunGlasses & SkiGoggles



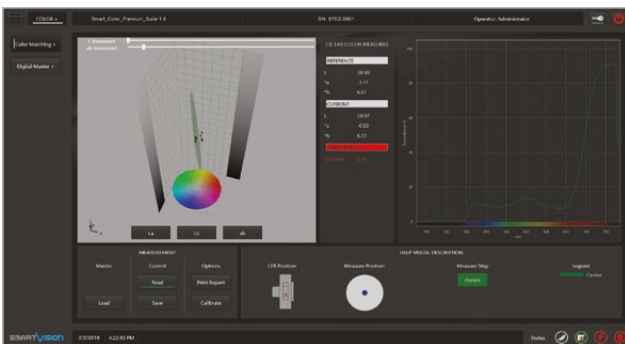
Color Matching

Lens colorimetric measurements



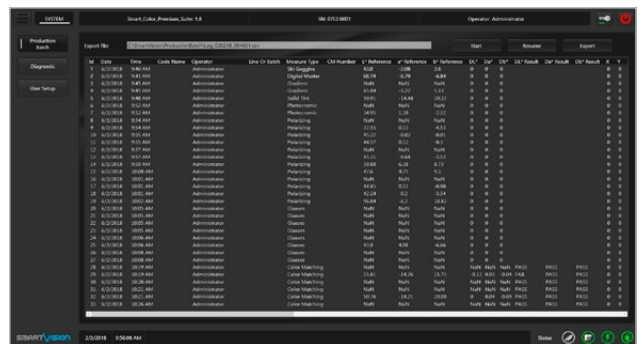
Digital Master

Create model for reference use



Color+ (Optional)

Advanced colorimetric control

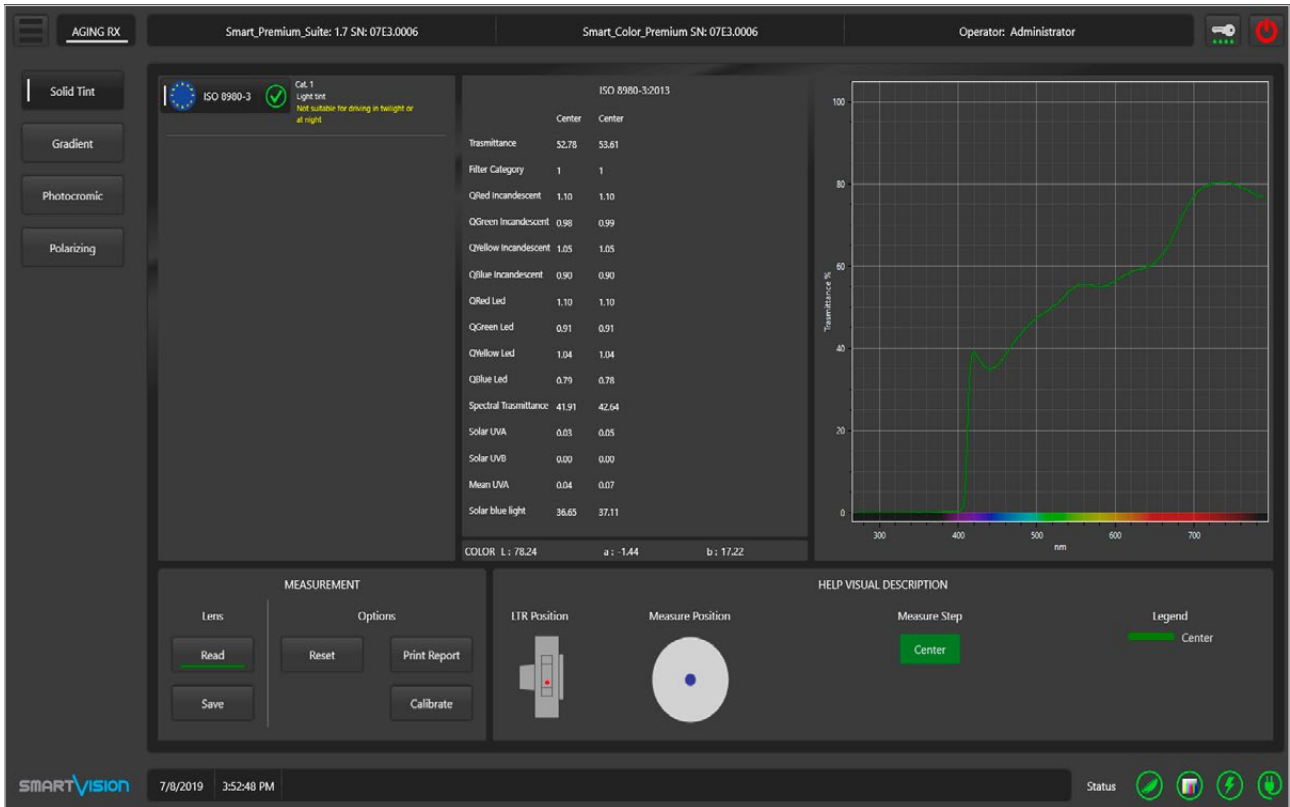


Production Batch

Includes all the values calculated

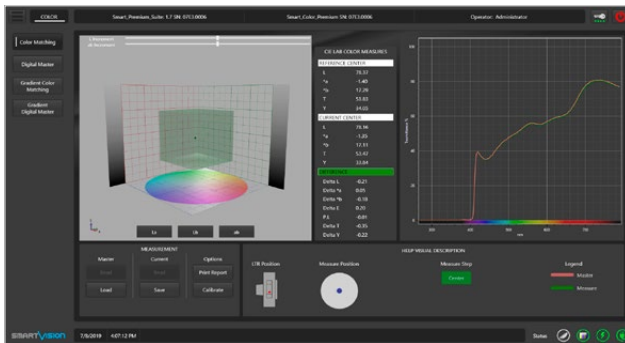
Smart Features

Software



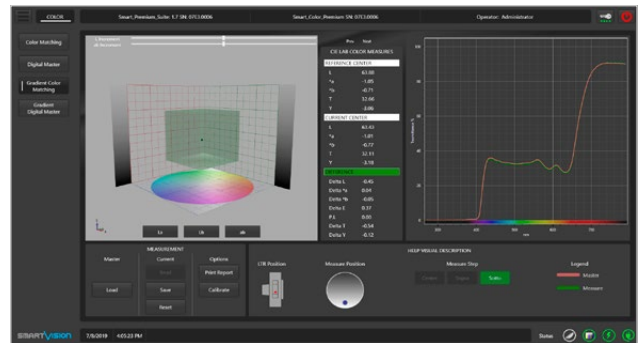
Aging (Optional)

Conformity check on SunLenses and Ophthalmic lenses (Resistance to radiation)



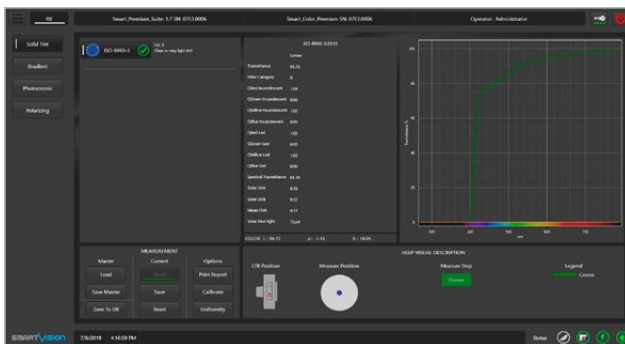
Yellowness

Conformity check of the yellowing of the lens e.g. "Blue cat"



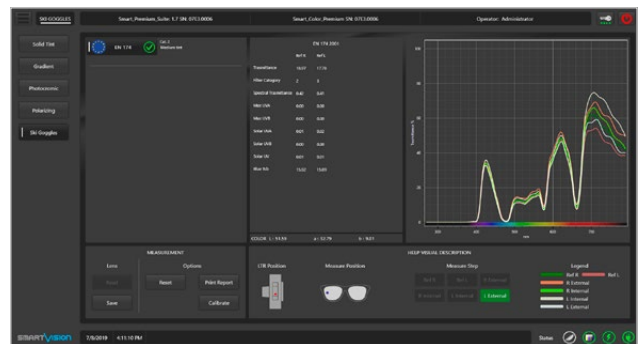
Color Gradient

Check of color differences and transmittance



Ophthalmic (Optional)

Conformity check of RX plano lens



SkiGoogle (Optional)

Conformity check of Mask and SkyGoogle

Technical Specifications

Spectrophotometer for Lenses, SunGlasses & Masks Producers

Main Functions	<ul style="list-style-type: none">• Individual Pass-Fail lamp signal indicator for every single International Standard• Customizable setting of accepted tolerance of color differences• Digital Color-Master_Item Reference Management (Save & Name, Load Model)• Points out the reason of a failure• One shot color analysis• Display 3D graphics to view the color space, parallelepiped of acceptability and measured points• Spectrum Stability Continuous Control [SSCC Feature] - Allows more accurate measurement• Lamps Warm-up Dynamic Control [LWDC Feature] - Warm up time will be minimum possible allowed by the hardware• Auto-calibration of the instrument [CPCF Feature] - No visible calibration and no interruption of the measuring cycles• Display of transmittance curve with color indication for each frequency of light, zoom, pan and display of transmittance values for single wavelength• Full automatic Technical Data Sheet (International Standards and Color report) reports on PDF or direct print• Spectral transmittance values file output• Full automatic Production Batch in Excel file• Remote assistance function
Technical Specification	<ul style="list-style-type: none">• Complete check of transmittance proprieties according to ISO 12312-1; ANSI Z80.3; AS/NZS 1067; EN 1836.• Optional: ISO 16321-1 Eye and face protection for occupational use; EN 174 SkiGoggle test; ECE 22-06 Helmets test; Uniformity of lenses test; Photochromic lenses test; Polarized lenses test; SunGlasses imbalance; ISO 8980-3 RX test; Chinese Standard GB 39552-1, GB 10810.3 & QB 2457-99 test, Aging RX test; Color+; Machine; Signal Light LED test; Smart_Data_Collection SPC.• Transmittance / Spectral Transmittance• Filter category• UV transmittance• Q factors• Signal light recognition for incandescent light (option led light)• Check cycle and full report output in less than 1 second.• Measurement range 280 - 780 nm.• Complete check of color differences ΔE, L^*, a^*, b^*, transmittance and Yellow Index.• CIELAB 1976, CIELAB 1994, CIELAB 2000, CMC color spaces with the following settings:<ul style="list-style-type: none">- Illuminant Type: A, C, D, F- Observer Degree : 2° and 10°- Color perception index developed specifically for solar filters (P.I.)
Dimensions (mm)	570 x 160 x 110 mm (lateral knobs included)
Weight (kg)	6 kg (excluding PC)
Power supply	110-240 Vac 50-60 Hz
Power consumption	2 A (12 Vcc Included)
Communication interface	USB 2
Case	Black Opaque painted Anodized Aluminum Case
Optional PC Device	Powerful All-in-One PC, Full HD Touchscreen, Monitor resolution 1920x1080, Windows 10 PRO 64-bit
Software Interface	Multi Language Dynamic Setup (English, Italian, French, Simplified Chinese already installed)
Statistical Analysis	Ready to connect with SPC software
Data Report	xlsx, xls, pdf
Print Report	Windows installed Printer (optional pdf), xps
PC Software Backup	USB stick containing the backup system (bootable system startup)
Online Support	Pre-installed TeamViewer app Support

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