

+ SWISS MADE

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DESIGN



smartglass M3 IPL

Aktive Schutzbrille Active Safety Glasses

ARBEITEN IN FARBE
2.5  8



Instruction Manual

Warning! The active safety glasses smartglass M3 IPL are intended exclusively to protect from intense pulsed light such as the light emitted by IPL (intense pulsed light) treatment.

Please read the instruction manual before first use.

This personal protective equipment (PPE) complies with EU regulation 2016/425, with effect from April 21, 2018.

Characteristics

- Reaction time of less than a millisecond
- Full color recognition and natural view with realcolor optics
- Maximum eye protection at minimum weight
- Combining comfort with safety
- CE certified according EN166, EN170, EN172, EN379, ISO 12609-1

Application

The active safety glasses **smartglass M3 IPL** were developed for people working with IPL-pulses. The active safety glasses **smartglass M3 IPL** reliably protect against harmful IPL-pulses while working comfortably.

The active safety glasses **smartglass M3 IPL** are fully operational out of the box. There is no on/off switch. The active safety glasses **smartglass M3 IPL** will darken automatically.

Technology

The shade level of the light state of the active safety glasses **smartglass M3 IPL** is 2.5. Upon the firing of an IPL-pulse, the active safety glasses **smartglass M3 IPL** automatically switch from the light state to the dark state at shade level 8 within less than a millisecond. The electronics were designed to only start darkening once an uncomfortable illuminance threshold is reached.

The active safety glasses **smartglass M3 IPL** protect in the wavelength range of 200 – 3000 nm. The light state of the realcolor optics is clear and color neutral. This allows the user to accurately perceive skin properties as well as signal colors.

Technical specifications

- Frame material: Polycarbonate (PC), skin-friendly
- Functional insert material: Glass/Plastics, skin-friendly
- Total weight: 42 g
- Dimensions: 170 x 150 x 50 mm
- Standards CE: EN166, EN170, EN172, EN379, ISO 12609-1
- Warranty: 5 years
- Lifetime: Min. 6 years including battery

Marking CE

3 / >8 / GEO / 1 / 1 / 1 / 2 / 379 CE

Light state	Dark state	Manufacturer	Optical class	Diffusion of light class	Variations in luminous transmittance class	Angle dependence of luminous transmittance	CE standard
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An original **smartglass M3 IPL** must have this marking!

Manufacturer: castelberg design gmbh
Etelstrasse 44E
8020 Wädenswil
Switzerland

Notified body: ECS GmbH (1883)
Hüttfeldstrasse 50
73430 Aalen
Germany

The declaration of conformity can be found on our website:
castelberg-design.com

Maintenance, lifetime and warranty

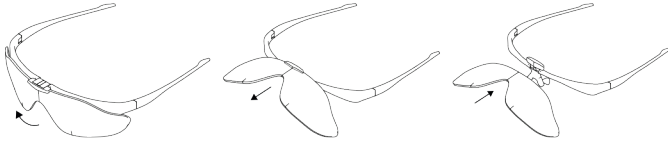
The active safety glasses **smartglass M3 IPL** require no maintenance besides cleaning. They should be cleaned with a microfibre towel or any other towel intended to clean glasses. For disinfection use a standard disinfectant with a towel. Do not pour or spray liquids directly on to the glasses.

Power is provided by an integrated lithium ion battery. The battery lifetime is 6 years at minimum and it can be replaced by the manufacturer. Please dispose the product at the end of its lifetime in an appropriate manner for electronics.

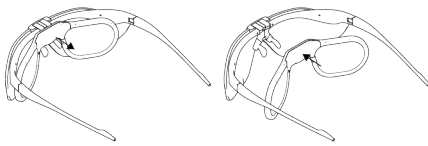
The warranty for material and manufacturing mistakes is 5 years. Damages that result from physical abuse of the product are not covered by the warranty. The warranty only applies for the intended use case and only to unmodified products. Besides legit warranty claims, no other damages are covered.

Changing of cover lens and functional insert

Cover lens:
Flip the cover lens upward. Pull the cover lens out of its holder. Insert a new cover lens and let it snap into position.



Functional insert:
Push a coin or a similar flat solid object between the frame and the functional insert. Twisting the coin will eject the insert. Align the cam of the functional insert with the corresponding hole on the frame. Gently push the functional insert into the hole of the frame until it snaps into position.



Security advice

The active safety glasses **smartglass M3 IPL** may not be used for other purposes besides protection from IPL-pulses.

The active safety glasses **smartglass M3 IPL** should be stored at temperatures from -10°C to +40°C and at a relative humidity below 80%. Avoid moisture and sunlight. The operating temperature is between -10°C and +55°C. Prolonged use outside of ideal temperatures can lead to damages that are not covered by the warranty. Storage together with acids, alkalis, oils or organic solvents can lead to damages to the product.

In rare cases allergic reactions to the glasses are possible. If the glasses cause skin irritation, the active safety glasses **smartglass M3 IPL** must not be used further and medical advice is recommended.

The active safety glasses **smartglass M3 IPL** is certified as the combination frame, cover lens and functional insert. The functional insert must not be used without the cover lens.

If the active safety glasses **smartglass M3 IPL** do not operate normally or are clearly damaged they must not be used further.

Wearing the active safety glasses **smartglass M3 IPL** on top of other glasses can transmit shocks of high-speed particles and can therefore be dangerous to the wearer.

Any application of the **smartglass M3 IPL** outside of the specified conditions, especially under extreme temperatures or exposure to high-speed particles, is forbidden.

Accessories / Spare parts

Frame, cover lens and functional insert are easily exchangeable. They can be ordered individually.

Frame white complete with cover lens clear blue
Item no.: 20.050

Cover lens clear blue
Item no.: 10.810

Functional insert M3 IPL
Item no.: 20.055

Distribution

Distribution is taken care of by the qualified retailers, our online shop or by contacting us directly. We will also gladly recommend you a local distribution partner.

Please visit our website castelberg-design.com where you can find further information.

If you have any questions, please do not hesitate to contact us. We will gladly help you.

