

smartglass M5 IPL

Active Safety Glasses

Aktive Schutzbrille

+ SWISS MADE

ARBEITEN IN FARBE

2.5  8



Instruction Manual

Warning! The active safety glasses smartglass M5 IPL are intended exclusively to protect from intense pulsed light such as the light emitted by IPL and BBL treatments.

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

- Wearable as fitover glasses
- Reaction time of less than a millisecond
- Full color recognition and natural view with realcolor optics
- Maximum eye protection at minimum weight
- Certified according EN 379 and ISO 12609-1

Application and function

The active safety glasses smartglass M5 IPL are fully operational out of the box. There is no on/off switch and they will automatically darken when the illuminance threshold is exceeded. The product adapts to pulse length and will stay dark for pulse trains with a maximum dark time of 4 seconds.

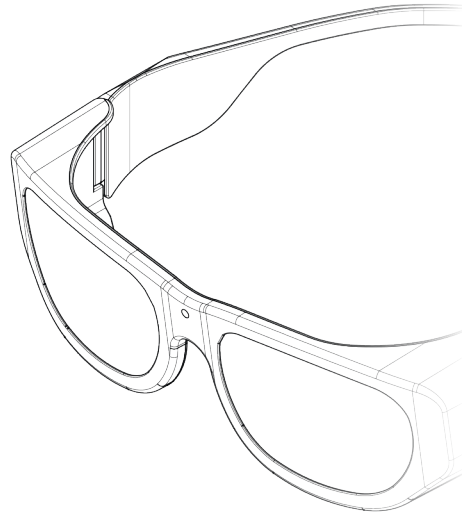
To guarantee optimal function, make sure that the sensor window that resides between the optics is unobstructed. Avoid directly facing bright light sources or sunlight while working, this might trigger the product at unwanted times and affect its behaviour.

The smartglass M5 IPL safety glasses protect the user from ultra-violet, visible and infra-red light. The UV and IR protection is passive and permanent, it does not depend on the state of the optics. Blocking of the visible part of the light happens when the optics change to the dark state.

If the process of darkening the optics becomes slower than normal, the battery is weakening and must be replaced.

Technical specifications

- Frame material: Polyamide (PA), skin-friendly
- Optics material: Plastics, skin-friendly
- Total weight: 42 g
- Dimensions: 158 x 161 x 52 mm
- Standards: EN 379, ISO 12609-1
- Warranty: 5 years
- Lifetime: Min. 6 years



castelberg DESIGN



Marking CE

2.5 / 8 / GEO / 1 / 2 / 2 / 2 / 379 CE

Light state	Dark state	Manufacturer	Optical class	Diffusion of light class	Variations in luminous transmittance class	Angle dependence of luminous transmittance class	CE standard
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An original smartglass M5 IPL must have this marking!

Manufacturer: castelberg design gmbh
Etzelstrasse 44E
8820 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 M5 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 a lithium-ion battery. The battery lifetime at normal use is 2 years and it can be replaced by the user. 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.

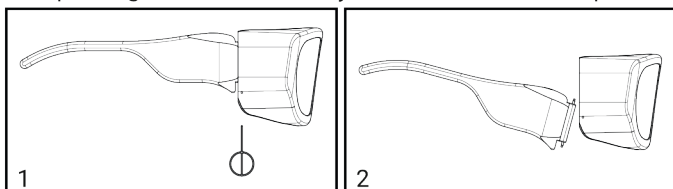
Battery replacement

Before replacing the battery, you need:

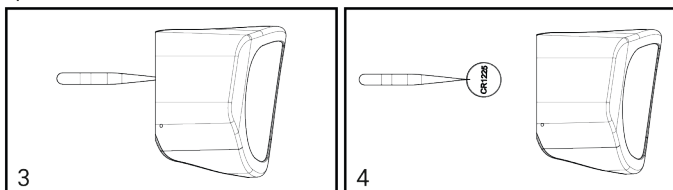
- The included ejector pin or a thin metal pin (< 1 mm diameter)
- Flat pincer
- CR 1225 button battery
- A coin or a similarly flat object

To replace the battery, follow these steps:

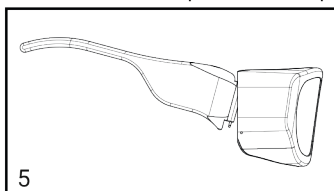
- Use the metal pin to compress the spring bar inside of the right temple hinge from below until you can remove the temple.



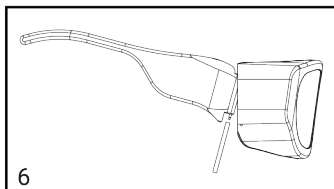
- You should now be able to see the battery and remove it with the pincer.



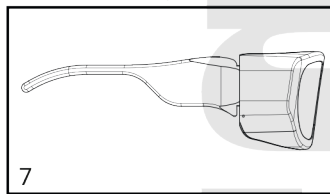
- Insert the new button battery by hand and make sure that the orientation is correct (+ outside, - inside).
- Re-insert the temple on the top side first.



- Re-insert the temple on the bottom side by compressing the spring bar again with the coin.



- If done correctly, the spring bar will lock the temple in position and the battery replacement is complete.



Security advice

The active safety glasses **smartglass M5 IPL** may not be used for other purposes besides protection from intense pulsed light.

The active safety glasses **smartglass M5 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 M5 IPL** must not be used further and medical advice is recommended.

If the active safety glasses **smartglass M5 IPL** do not operate normally or are clearly damaged they must not be used further.

Wearing the active safety glasses **smartglass M5 IPL** on top of other glasses can transmit shocks of high-speed particles to the wearer.

Any application of the **smartglass M5 IPL** outside of the specified conditions, especially under extreme temperatures or exposure to high-speed particles, is forbidden.

Accessories

Included with every pair of smartglass M5 IPL safety glasses are:

- Carrying case to store and transport the glasses safely
- Textile bag to protect the glasses from scratches
- Cleaning cloth to clean the glasses
- Safety cord for fall protection if necessary
- Anti-slip wings to prevent slip off if necessary

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.

