

# Unitron Group

## Product

## Eye Surface Profiler

Perfect fit contact lenses

## Eaglet Eye



### *Eaglet Eye about Unitron*

*We have outsourced the production of the Eye Surface Profiler to Unitron. This was preceded by a careful and thoughtful selection process where we compared six parties. Unitron stood out above the rest because of a sophisticated, scalable approach to manufacturing. This allows us to scale up production of single pieces to several hundred in a cost-effective manner. This means that with Unitron, we have a partner we can work with for years to come. This is essential for the continuity of Eaglet Eye.*



**The Eye Surface Profiler (ESP) of Eaglet Eye creates a 3D profile of the eye, based on which a contact lens professional can provide an individualised solution; a contact lens that fits perfectly and is comfortable to wear. Unitron is responsible for the assembly, adjustment and shipment of the ESP. An important aspect here is the adjustment of the black box in a dust free flow cabinet.**

About 90% of lens wearers use standard lens sizes. The 3D profile provides contact lens manufacturers the ability to manufacture custom lenses, which is ideal for people with different eye profiles or people who are looking for the maximum comfort in eyewear. In recent years, the ESP unit has been further developed into a production model. Unitron realised the 0-series and is currently responsible for the entire production of the ESP.

### **Sparring partner, technical and financial**

The partnership between Eaglet Eye and Unitron is based on intensive collaboration, where the competences of both the customer and Unitron are leveraged to the fullest extent possible. Unitron provides strong added value in all areas; preparing the ESP for production, making its network of contacts available and collaborating on the business concept.

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#### Technical specifications

- Dimensions: 500mm (h) x 350mm (w)
- Blackbox: left and right projection and main group
- Components: 8 mirrors  
3 filters  
13 lenses  
CCD Camera  
control board
- Inter-line distance: 0,254 mm
- Measurement points: > 250.000

#### Eaglet Eye BV

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#### Unitron about Eaglet Eye

*The collaboration with Eaglet Eye is best described as transfer of knowledge. This is only possible if both parties are open to improvements and looking out for each other's interests. Thanks to the advent of the ESP, Unitron has gained new knowledge in the fields of optics, precision mechanics and low-dust production in a flow cabinet. In close consultation with the customer, we were able to make the alignment process more production-friendly, ensuring the quality of the measurement accuracy.*

The ESP (Eye Surface Profiler) is a ground-breaking, aesthetically designed device. It allows for accurate and easy measurement of corneal topography. The innovative way in which the entire cornea of the eye is measured ensures greater precision than ever before. The ESP can measure up to 20mm diameter of the anterior surface of the eye by projecting two overlapping line patterns (from left and right) on the eye at an 18-degree angle. Using more than 250,000 measurement points, the device accurately records the surface differences, resulting in a highly accurate 3D profile measurement of the eye.

#### Packed with optical knowledge

The first version of ESP with which Eaglet Eye approached Unitron was still a few important steps shy of being a production-ready product. Working closely with Eaglet Eye, especially in the field of optical knowledge, Unitron developed a product, which can be assembled in an accurate and smart way, in significant volumes. Adjustment of the ESP takes place in a dust-free flow cabinet. In addition to technical knowledge, Unitron also leveraged its knowledge in developing a total business concept. Unitron also called on its network of investors to provide financial backing for Eaglet Eye.



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Unitron develops and manufactures complete products such as medical equipment and specific industrial electronic products. This ranges from the realisation of a totally new concept to modification and optimisation of existing products. When combined with our experience and operational capabilities, the result is a complete business concept. Unitron operates in a variety of markets throughout the world.