

ActiveLook®

Visual Information in Action



Head-up Display Platform for Sport Glasses

Phabulops

Lite AR – HUD Smart Glasses Requirements

Weight <40g

Comfort during physical activities is a need to have!

Good Design

(Sports) Glasses are a fashion item

Autonomy

>8 hours for most of physical activities and use all day long

Content Visibility

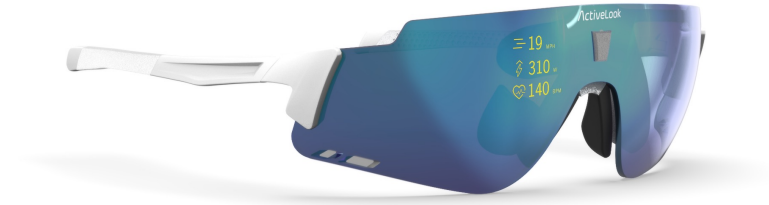
Need good content visibility during bright day light and night

Non intrusive

Unblock peripheral vision and central vision for safety and “stay in the Flow”

Relevant Content

Wide variety of content for multiple use case and user segments.



ActiveLook® : the components (+6g)

Optical System

High precision micro-projector

Display

Low power (1mW) 0.19' AMOLED

Electronics

Dialog based "Smart Wearable on Chip" with 4.2 BLE

Lenses

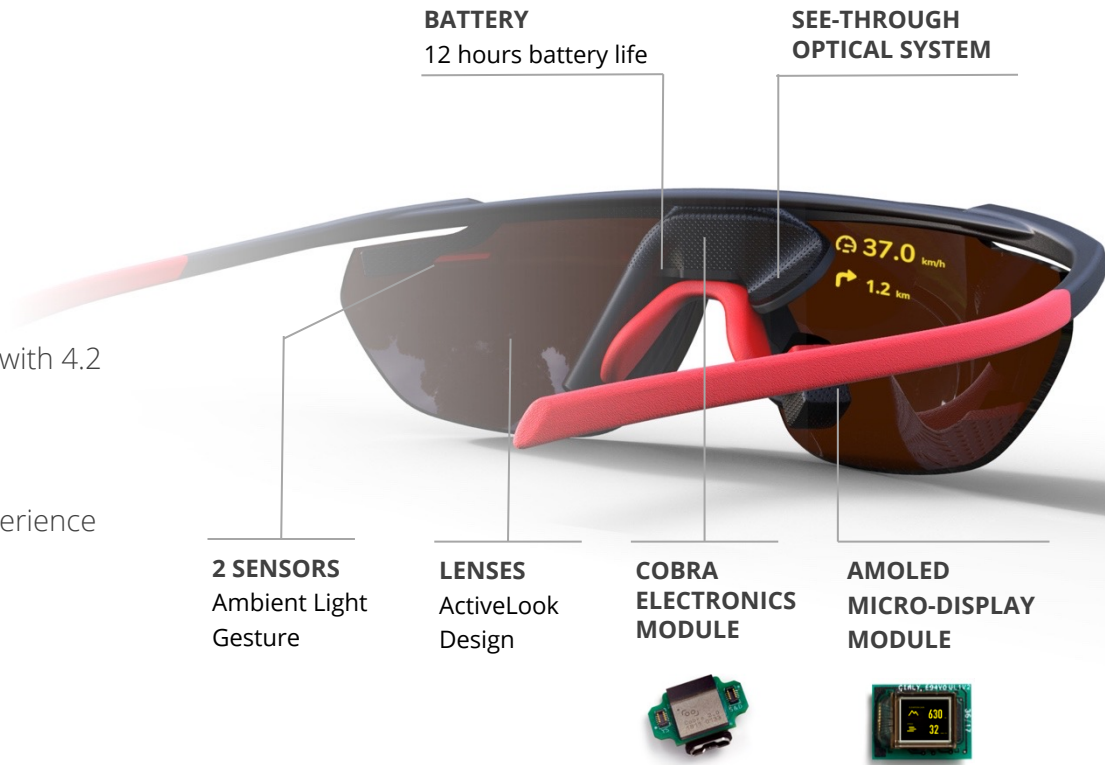
Custom coatings to maximize visual experience

Sensors

Ambient light and gesture sensors

Battery

12 hours autonomy



The 1mW OLED micro-display

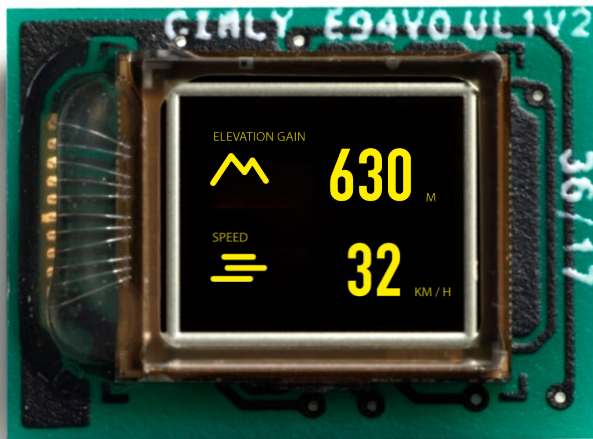
Low power: typ. 1mW , made possible because of “memory pixel” design to avoid need for refresh scanning

Compact: 0.19” with extremely high pixel density

High Brightness: Efficient “Yellow” color OLED compound with tandem architecture.

Resolution: 304 x 256 pixels enabled by extremely high pixel density.

Color: 16 “grey” levels (development in progress for a 16 colors version)

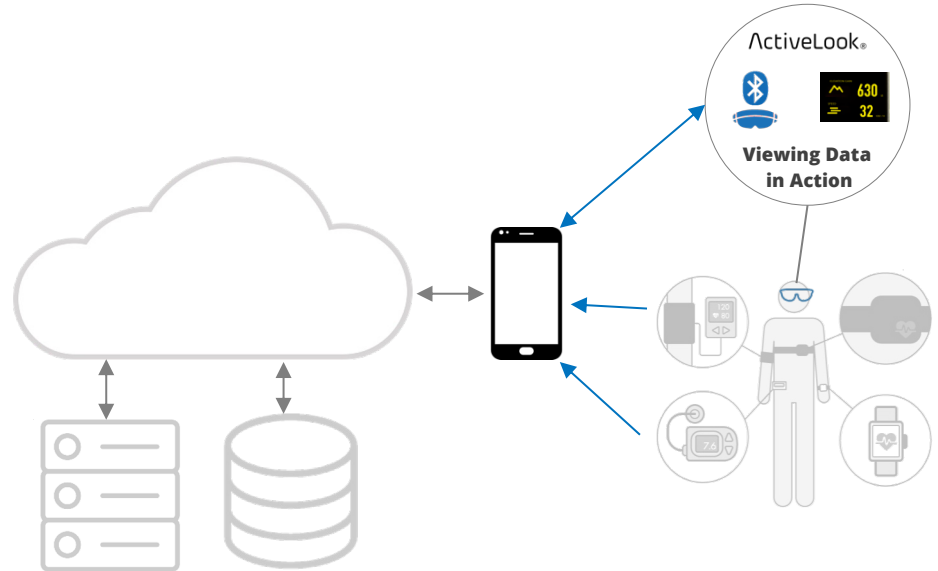


A “smart” architecture

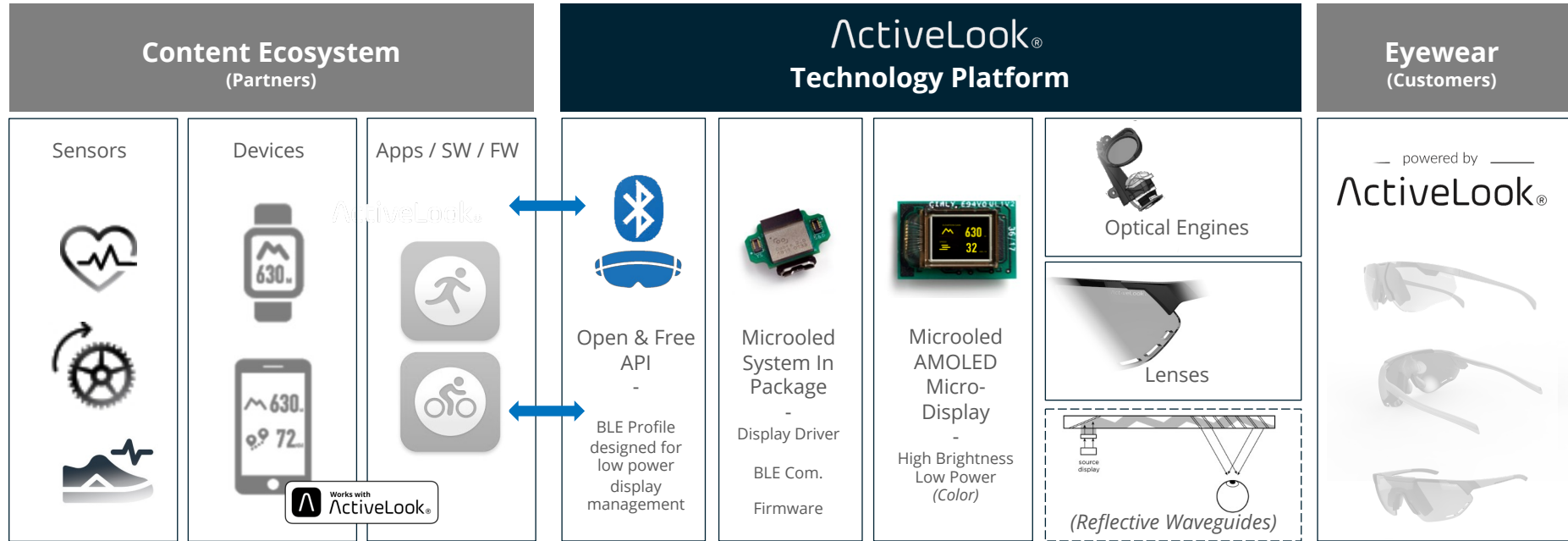
A low power BLE “Connected Display” ...



... part of smart & wearable architecture

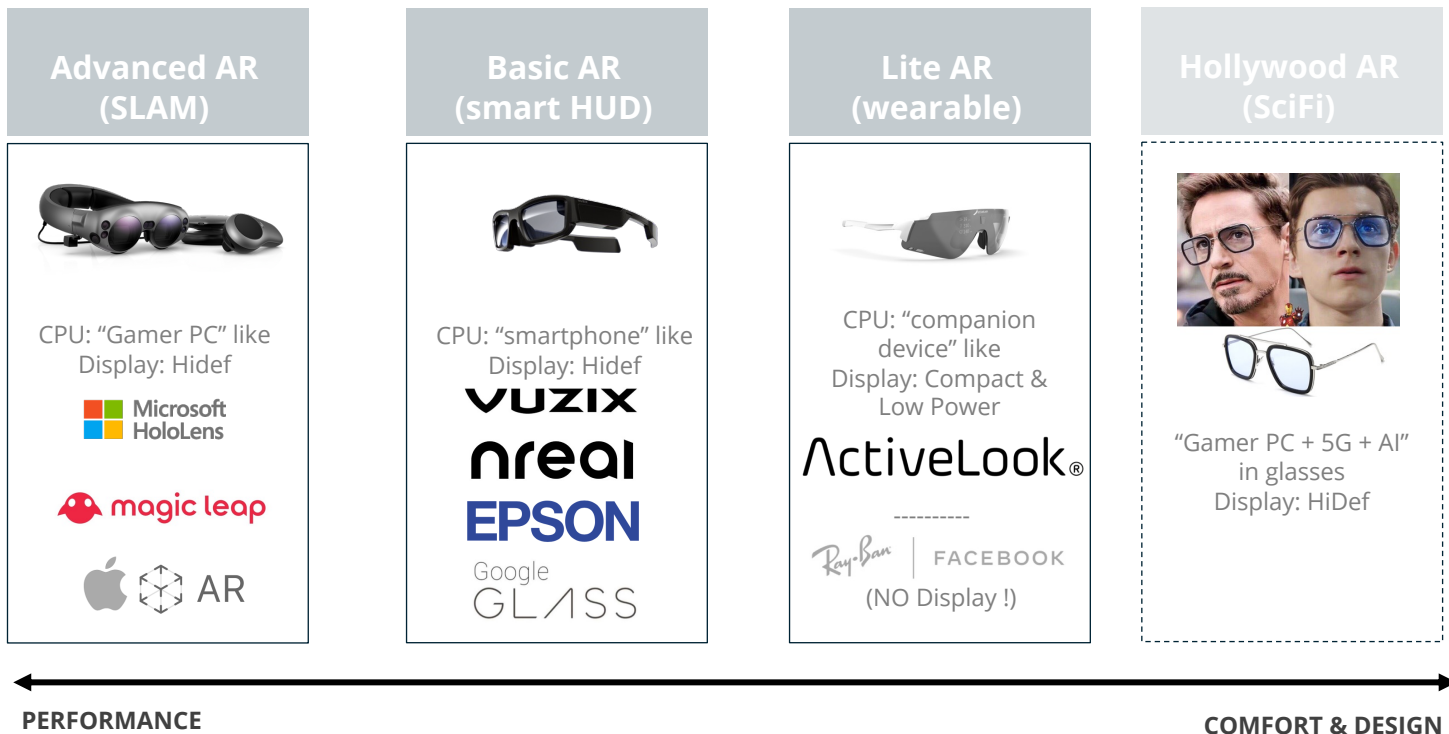


ActiveLook® : a Smart Glasses Product Platform



Augmented Reality Market Segmentation

ActiveLook® is the only technology to enable display in Lite AR segment



ActiveLook® versus Ray Ban /FB or cameras vs. displays

ActiveLook®



- **Provide** information
 - **Open** API
- Main use case : **sports**
- **Multiple** eyewear brands ecosystem
 - **35g**

Ray-Ban | FACEBOOK



- **Capture** Information
 - **Closed** API
- Main use case: **social networks**
- **Single** eyewear partner
 - **49g**

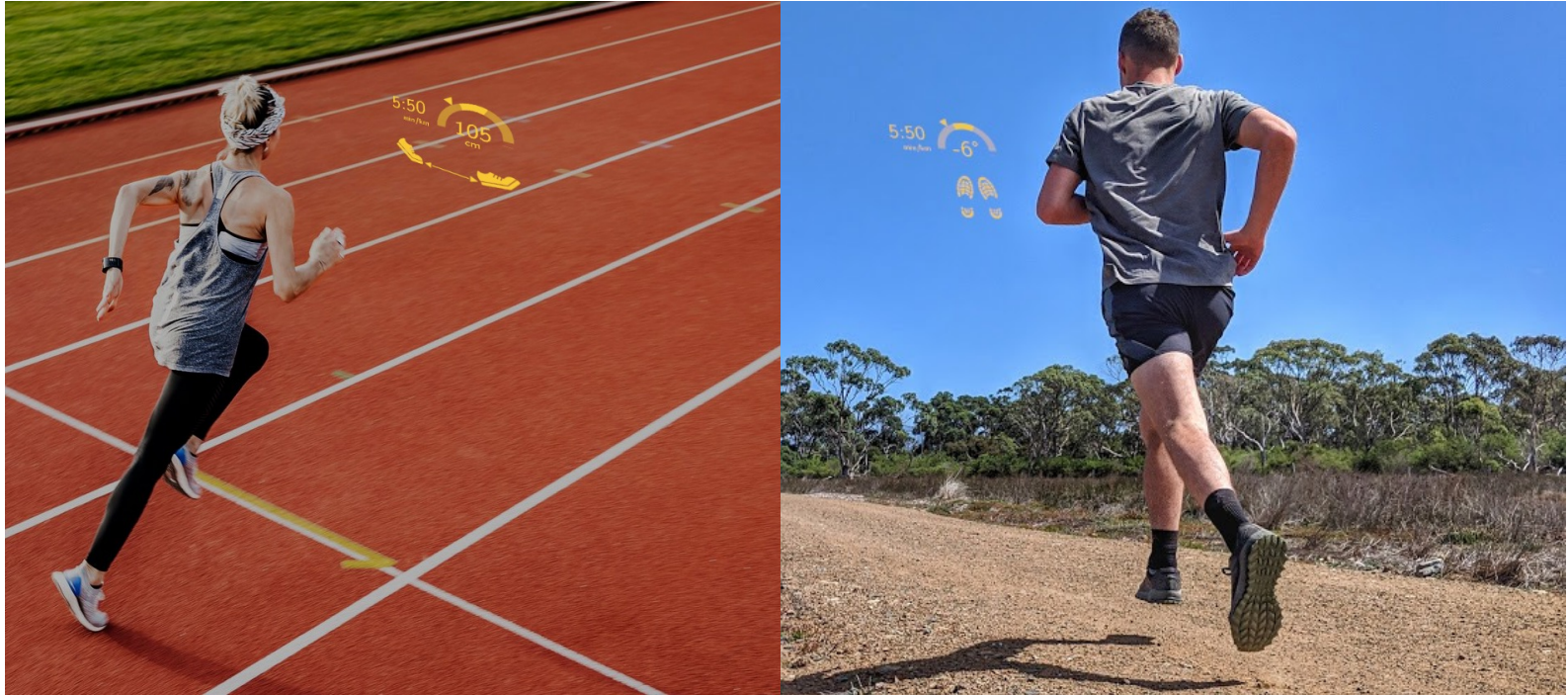
Good design + Partnerships with eyewear industry

ActiveLook® : coaching, motivation & gamification



ActiveLook® : Wearables Bio-Feedback

Visual feedback is widely used to modify a motor skill. Current feedback modalities are complex and un-practical. ActiveLook technology can greatly improve visual biofeedback: Technique Training, Rehabilitation, Retraining (Gait, Stride, ...)





Thank you!

ActiveLook®
by microoled