## PRESS KIT



# SERENITY EYEWEAR by Ellcie Healthy: When Artificial Intelligence looks after you

















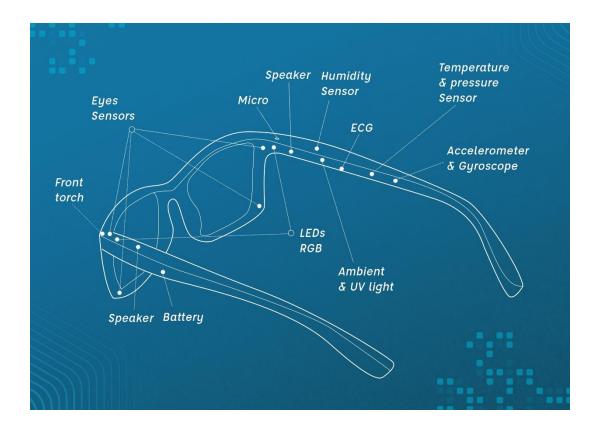
### Ellcie Healthy develops connected glasses with Artificial Intelligence

Founded in 2016 by Philippe Peyrard (25 years of experience in optics) the French start-up Ellcie Healthy develops smart glasses equipped with Artificial Intelligence ensuring the safety of people.

The first version of the glasses helps drivers to prevent drowsiness.

Fifteen sensors integrated in the branches and the face of the telescope, measure physical, physiological and environmental data. These data are interpreted by the artificial intelligence of the solution to establish a risk of falling asleep and to warn the driver, and possibly his passengers by SMS.

If the eyewear detects enough drowsiness signs, the glasses will start ringing and flashing to warn the user and restore the attention that will enable them to reach the next resting area safely.



"Ellcie Healthy gathers engineers, scientists, marketing, communication and industry people with one thing in common: the will to take care of their peers, and the energy to make it happen "- Philippe Peyrard

#### **FOCUS ON DROWSINESS DETECTION**

Falling asleep is one of the major factors of danger on the road as drowsiness at the wheel is the leading cause of fatal accidents on the highway<sup>1</sup> and one in ten drivers has already or almost lost his life as a result of drowsy driving.

Public inquiries and specialists all agree that the "sleep debt" is worsening and increasing every year. The French sleep 1:30 less than 50 years ago <sup>2</sup>. Insufficient sleep has consequences for attention, alertness and performance. This lack of sleep leads to daily risky behavior, especially during road trips. While the car is preferred by 8 out of 10 employees to go to the workplace <sup>3</sup>, 63% say they feel tired in the morning before even taking the road <sup>4</sup>. 76% of French people say that you must never drive in a state of fatigue<sup>5</sup>.

63% say they feel tired in the morning before even taking the road

When going on vacation, the sleep debt increases. There are multiple reasons; late check-in, luggage preparation, late-night or early-morning departure, disturbed by the stress of the trip. They are, moreover, 42% to declare to take the road while they feel very tired. The consequences are significant, 33% of drivers have already felt asleep for a few seconds at the wheel and 26% have already rolled on the emergency stop band or on the side because of a moment of drowsiness <sup>6</sup>.

Road professionals are also concerned. While lack of sleep results in decreased reaction time, visual field changes, or judgmental disorders resulting in risky risk taking, more than one in four (28%) truck drivers 6 hours before taking the road for a long journey and nearly one in three (30%) feels likely to have an accident because of drowsiness <sup>7</sup>.

Drowsiness increases the risk of road accidents by 8 and is the leading cause of fatal road accidents.

<sup>&</sup>lt;sup>1</sup> ASFA 2016 – accidents mortels

<sup>&</sup>lt;sup>2</sup> Inserm

<sup>&</sup>lt;sup>3</sup> Étude d'Euro Car Part 2018 ou selon enquête Insee (basée sur le recensement 2014) 7 Français sur 10

<sup>&</sup>lt;sup>4</sup> Édition 2016 du Baromètre de la conduite responsable, réalisé par IPSOS pour la Fondation VINCI Autoroutes

<sup>&</sup>lt;sup>5</sup> Fondation Vinci Autoroute, Ipsos panorama français des comportements au volant (19-29 janvier 2018)

<sup>&</sup>lt;sup>6</sup> Baromètre de la conduite responsable 2017, réalisé par l'IFOP pour la Fondation Vinci Autoroutes.

<sup>&</sup>lt;sup>7</sup> Étude de la fondation Vinci Autoroutes 2014

<sup>&</sup>lt;sup>9</sup> Baromètre de la conduite responsable 2017, réalisé par l'IFOP pour la Fondation Vinci Autoroutes.

The link between sleep quality and work performance is no longer in doubt. More of the majority of the employees would like to sleep more. These disorders affect the quality of the work provided and are factors of work accidents. 55% of the workers would like to sleep more. Drowsiness has a significant impact on the level of alertness and increased risk of accidents while driving but also for night work or repetitive work In France, 1 in 4 employees work staggered hours or nights. That is, according to the official definition, between 9pm and 6am. Sleep disorders are among the main difficulties encountered in these work. 60% of these employees are aware of this. Insomnia would affect 30% of these professionals and drowsiness 15 to 20%. For example driving between 2 and 5am multiplies by 5.6 the risk of road accident.9.

In 2016, road accidents accounted for 2.2% of GDP. The French state had to pay 38.3 billion euros because of accidents. To these figures must be added the cost of only material accidents. That same year, these accidents, declared in civil liability with insurance companies, have cost 10.4 billion euros. This amounts to a total of almost 50 billion euros. Or 2.2% of GDP<sup>10</sup>.

1 st cause of mortality on highwaycause



1/3 of fatal accidents on the highway is due to falling asleep



3 X more risk of accidents for 5h of sleep or less the day before a departure



More than 17 billion € /
year spent on road
accidents caused by
drowsiness

<sup>8</sup> Enquête DARES, 2011

<sup>&</sup>lt;sup>9</sup> Connor J et al, BMJ 2002; 324:1125

<sup>10</sup> Rapport de l'Observatoire national interministériel de la sécurité routière

#### **FOCUS ON FALL**

#### **Elderly**

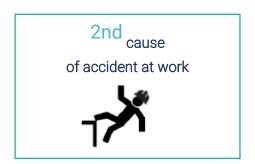
The aging of the population, especially the increase in the number of very old people and the difficulties of societies in adapting to these demographic changes, have for some decades been a public health issue. The accumulated importance of the demographic weight of the elderly imposes a price for this population in the programs for welfare and health. The effects of aging are inevitable. They are characterized by the appearance of chronic disabling diseases, which have an impact on daily life and quality of life11.

The fall is a major event in the life of an elderly person. In the face of the fear of institutionalization, falls are often ignored, especially when there are no witnesses or visible injuries. The fear of relapse favors the adoption of an even more sedentary lifestyles to social isolation and a significant decrease in the quality of life12.

1st cause of death for elderly

#### Work accident

Occupational risks are still important social and financial issues for most companies, as 85% of the french companies surveyed reported at least one incident. All claims in 2018 represent 72% of work stoppages, 14% of occupational diseases and 14% of commuting accidents.



#### **ABOUT ELLCIE HEALTHY**

Connected eyewear are a concentrate of technology from a hardware point of view, but also from a software point of view. As soon as your smartphone is connected to the network, the algorithms synchronize with the Cloud and are automatically enhanced by all the collected data. Thanks to software updates, the eyewear will soon be able to detect and even prevent falls, follow up physical activity and wellbeing and even early detect heavy diseases.



In order to control quality throughout the production chain, Ellcie Healthy glasses are **designed in France**. The company is proud to highlight the national know-how in the world of connected objects and makes it known through its OFG label.!



Price: 289€ incl tax (glasses + charger kit + 12 months of assistance)

Product range:



#### **Awards**



**Bpifrance Excellence** 



Prix Innovation Sécurité Routière 2018



Trophée PME Bougeons-Nous 2018

Lauréate pour la région Sud Est dans la catégorie 'Fabriqué Français'



Jeune Entreprise Innovante



Prix fondation MAIF



CES Innovation Awards Honoree 2019

Catégorie Wearable Technologies



Les Trophées de l'embarqué 2019



Innovation Award ST micro electronics

After launching its first generation of product in 2019, Ellcie Healthy unveils its new features (fall detection, activity tracking) on the CES 2020 and will be at the Eureka park booth n° 51052

Ask for an interview with Philippe Peyrard, founder and CEO of the smartup'