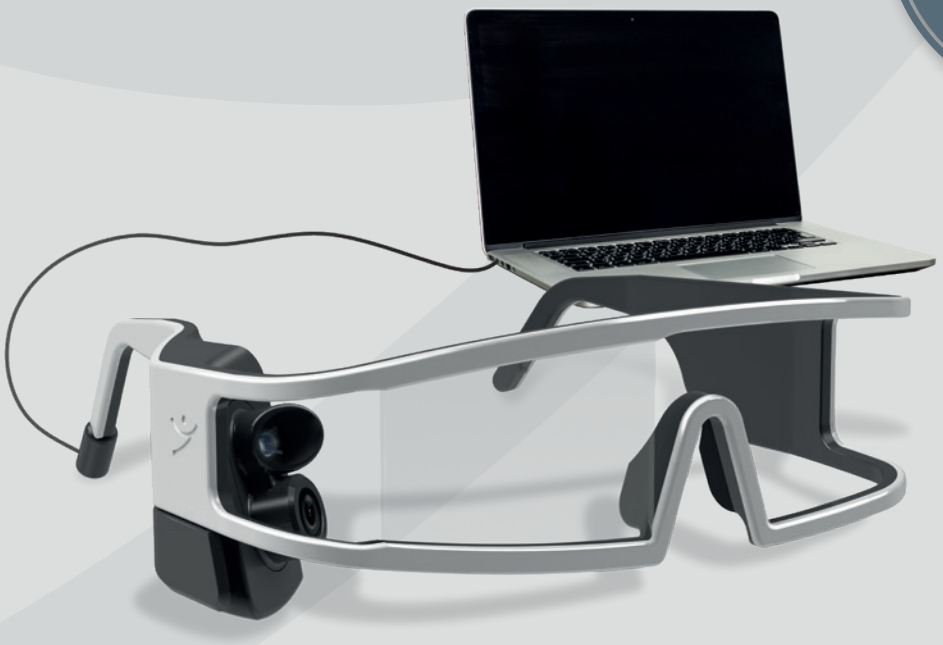
phasya

Drowsimeter R100

NEW
EYE METRICS
since 2018



Measurement of drowsiness and eye metrics based on eye images @ 120 Hz

AUTOMATIC • OBJECTIVE • REAL-TIME

www.phasya.com

The Phasya Drowsimeter R100 uses images of the eye acquired from a camera integrated into glasses to provide an automatic, objective, and real-time measurement of several drowsiness and eye metrics in most lighting conditions (from darkness to daylight).

The Drowsimeter R100 is dedicated to research applications. It consists of the Phasya Glasses, a standard laptop, and the Drowsilogic software. The ergonomics and the high-frame rate of Phasya Glasses ensure accurate and continuous measurements without disturbing the user.

Easy-to-use

- Setup and calibration in less than one minute
- Automatic and real-time analysis of images to provide drowsiness and eye metrics
- Intuitive visualization of data
- Well-known and widely-used export format to facilitate further data analysis

Starter package

- Phasya Glasses
- Drowsilogic software licence according to the modes selected (*drowsiness metrics* and/or *eye metrics*)
- Laptop
- Carry-on suitcase for safe storage and transportation
- One year of maintenance and software updates

Drowsiness metrics mode

- Accurate measurement of the level of drowsiness and ocular parameters related to eyelids activity
- Use of several ocular parameters related to eyelids and eyeball activity to ensure an objective measurement of drowsiness

Eye metrics mode

- Accurate measurement of three raw eye features related to eyelids and pupil at 120 Hz
- No calibration needed

Technical specifications

General specifications	
Frame rate of eye images	120 Hz
Export file format	text/CSV
Drowsiness scale – Level of Drowsiness	From 0 (fully awake) to 10 (fully drowsy)
Video recordings	Images of the eye taken by Phasya Glasses & Images taken by an external camera
Weight of glasses	104 g
Length of USB cable	1.8 m
Power supply	100-240V 50-60 Hz
***Drowsiness metrics* mode**	
Calibration	10 seconds – Automatic
Metrics	Level of Drowsiness, PERCLOS 70, mean blink duration, blink frequency, percentage of LEYECLOS*, mean LEYECLOS* duration
Recording frequency of metrics	1 Hz
Calculation window length of metrics	60 seconds
***Eye metrics* mode**	
Calibration	No calibration needed !
Metrics (in pixels)	Eyelids gap, pupil position, pupil diameter
Recording frequency of metrics	120 Hz

** LEYECLOS = long eyelids closure*

Phasya s.a. | Rue du Bois Saint-Jean, 29 | 4102 Seraing | Belgium
T. +32 4 246 35 37 | info@phasya.com
www.phasya.com