



# AdHawk MindLink™ from AdHawk Microsystems

The world's fastest wearable  
eye tracking system



## Overview

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The AdHawk MindLink™ eye tracking system from AdHawk Microsystems is the fastest wearable eye tracking system available. Delivered in the form of lightweight and comfortable glasses, AdHawk MindLink can connect accurate eye movement with human behavior, ocular, and neurological health.

AdHawk's eye tracking glasses can be worn comfortably to precisely measure eye movement, pupil size, and head movement using an integrated inertial measurement unit (IMU). The wearer's gaze is projected onto their world-view, which is captured by an integrated front-facing camera. By replacing traditional eye tracking cameras with ultra-compact micro-electromechanical systems (MEMS), AdHawk eliminates power-hungry image processing and improves eye tracking speed.



## Performance

→ Gaze calculations are encapsulated in a lightweight MCU, allowing for all-day use and delivering **high-resolution eye tracking experiences.**

## Speed

→ Gaze is captured with better than 1 degree of accuracy and sampled at 500Hz -- by far **best available in a mobile eye-tracker.**

## Efficiency

→ AdHawk MindLink consumes less power when connected to a mobile device, enabling **all-day use.**

## Flexibility

→ **Physicians and researchers are no longer constrained by bulky products that can only be used in a lab environment,** as they can now conduct eye tracking assessments in more settings than ever before, including a doctor's office, while hiking or biking, or even within a patient's home.

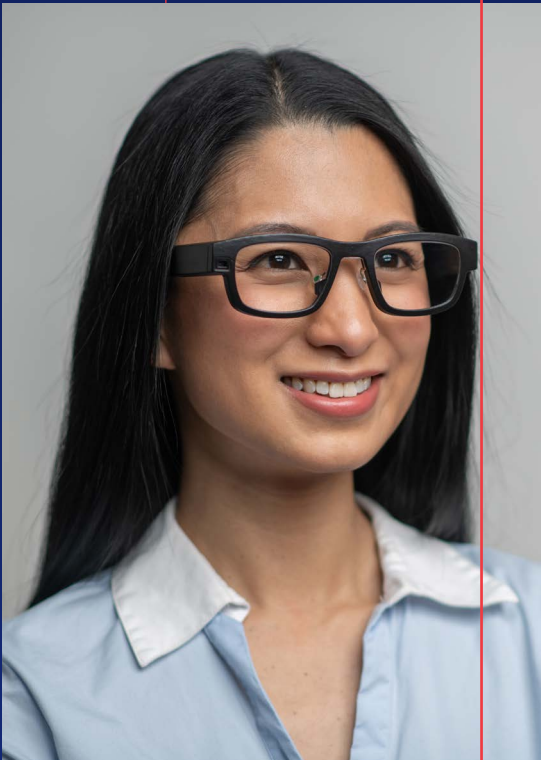
## Simplicity

→ With single-click operation, **eye tracking has never been easier --** just launch the app, tap "start tracking" to begin and go.

## Real-World Scenarios

→ **Science and Medical Research:** Eye tracking data provides medical and science researchers with new, valuable insights to improve the treatment of conditions like anxiety, ADHD, and epilepsy. It assists in the research of diseases like Alzheimer's and Parkinson's, and assesses cognitive load, dizziness and reading challenges. Advancements in eye tracking research can also improve concussion protocols and alter how patients respond to other brain injuries, including strokes.

→ **Gaming:** Video game manufacturers feel the pressure to keep innovating in the creation of deeply immersive experiences. Eye tracking research provides keen insights into how users interact with games and how they can be improved to provide a more thrilling experience. In the growing market of e-sports, eye tracking analytics can help athletes improve performance by replaying gaze and making adjustments to improve their game play. With screen-tracking, gamers can even use eye tracking as a rapid, intuitive input device.



### → **Industry and Human Performance (Training, Safety, Productivity):**

From factory floors to construction sites to warehouses, understanding employees' eye movements can increase worker safety and productivity. Eye tracking enables a better understanding of the connection to what workers see and how they physically respond. This data can result in changes to how workers are trained and perform on the job. As a result, potentially dangerous situations can be avoided and process improvements can increase financial performance.

→ **Marketing and User Research (Consumer Behavior):** Brands have long turned to data to improve product design, development, and the retail experience. With eye tracking technology, brands can gain unique insights into improving product design based on how consumers visually interact with products. Eye tracking data can be leveraged to improve every step of the marketing and sales journey, including understanding how consumers visually respond to print, digital, and video promotional materials, as well as in-store and e-commerce shopping experiences.

→ **User Interface Research:** Every aspect of work involves technology. By tracking how eyes move when interacting with software applications and devices, we can better understand how the user experience can be improved. Software developers and device manufacturers can then create a new level of ergonomics for the eyes, improving the way users interact with technology systems. AdHawk's gaze may be projected into screen coordinates to serve as an input device for assistive technology and user interface applications.



## Tech Specs

Preliminary specifications subject to change

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<b>Calibrated Range:</b>	40 × 25 degrees* (width × height)
<b>Gaze Mean Absolute Error:</b>	<1.0 degrees
<b>Gaze Data Rate:</b>	up to 500 outputs per second
<b>Calibration Points:</b>	user configurable from 1-9
<b>Latency:</b>	3 ms
<b>Scene Camera:</b>	1080p, 30fps, FOV 82 degrees diagonal

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### Eye Tracking Features

- Binocular Gaze Tracking & Output
  - Vergence Output
  - Pupil Size Output
  - Robust Tracking Under Sunlight
  - Single Click Eye Tracking
  - Slip Tolerant Eye Tracking
  - Export Eye Tracking Video
  - Export Eye Tracking Data
  - Gaze Validation Function
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### Glasses Physical

Properties Dimensions:	14.6 × 16.6 × 4.2 cm
Weight:	27 grams
Inertial Measurement Unit:	6 axis

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### Additional Features

- Interchangeable Prescription Lens Set Available for Purchase
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### Included in Kit

- Eye Tracking Glasses
  - Interchangeable Nosepieces
  - Attachable Ear Hooks
  - Smartphone
  - USB Cable to PC
  - USB Cable to Smartphone
  - Anti-Fog Cleaning Cloth
  - Glasses Calibration Fixture
  - Durable Carrying Case
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*\*Tracking beyond the calibrated range may compromise accuracy*