



Competitive Advantages

Primary Differentiators

Robust calibration	<ul style="list-style-type: none">▪ Faster calibration than existing eye trackers – 90 sec. or less▪ Maintain calibration longer – over 1 hr.▪ Highly mobile: subject can roam freely or remain stationary
Best algorithms	<ul style="list-style-type: none">▪ Innovative, proprietary pupil detection algorithms▪ Most consistent tracking – no random fitting▪ Excels for all skin colors, eye colors, and facial features▪ Automatically adjusts for makeup (e.g., mascara)▪ Automatically adjusts to users under the influence of drugs▪ Dynamically adjusts to ambient lighting changes
Fastest data analysis	<ul style="list-style-type: none">▪ Aggregate data up to 10x faster than existing eye trackers▪ Leverages latest visual attention research

Design Highlights

Eye Tracking

Accuracy	▪ 1° - 2° (limited to natural body movement)
Pupil detection	▪ Augmented graphical cross hair on each video frame
Fixation detection	▪ Augmented graphical circle on each video frame according to angle and time thresholds specified by user
Weight	▪ Eye tracking glasses weigh only 3 oz (75 g)
Logs	▪ Detailed time stamps, pupil location, fixation data, and user-specified tags for each video frame.
	▪ Standard ASCII file output compatible with almost any data analysis software

Mobility Options

Wireless	▪ Un-tethered wireless transmission of eye tracking data from Locarna's eye-tracker to a nearby PC
Real-time display	▪ Real-time eye gaze display on a nearby monitor to support immediate field notes and qualitative processes