Aurora



Big insights come in small packages

Looking for a research partner that can follow you anywhere? Aurora, Smart Eye's smallest remote eye tracker, is designed to deliver big insights wherever you are.

Aurora brings portability, versatility and superior performance, all while collaborating with other sensors and bio-measurement systems for a more accurate and user friendly research experience.

Technical Specifications

Sampling rate	60, 120 and 250 Hz
Headbox (Freedom of Head Movement)	50 x 40 cm at 65 cm distance
Operating distance	50-80 cm
Accuracy	0.3 degrees (typ.)
Precision	0.1 degrees (typ.)
Output data	Gaze origin, gaze point, pupil diameter, eyelid opening, head position and rotation, camera-time and real-time time stamp All outputs as binocular data with associated quality index
Gaze calibration	Both eyes or single eye
Time Stamp Precision	1 µs
Synchronization	8-bit markers*
Head pose recovery time	1 frame (immediate)
Blink recovery time	1 frame (immediate)
Gaze recovery time	1 frame (immediate)

Latency	25 ms (60 Hz), 17ms (120 Hz), 12ms (250Hz)
Eye Tracking Principle	Dark pupil and corneal reflection
Maximum Screen Size	24“ (16:9 aspect ratio)
Operating environment	Indoor (all illumination conditions)
Size	146 x 24 x 27 mm (width x height x depth)
Weight	162 g
Cable Length	2 m (up to 8m with additional hardware**)
Camera Interface	USB-C
Mount Type	On-screen (mounting plate included)
Operating System	Windows 10 or Windows 11
Processor Architecture	x64
Accessories	Aurora Expansion Box (8-bit markers) Extended USB-C cable

*Requires Aurora Expansion Box accessory
**Cable length limited to 2m for Aurora 250 Hz connected to Expansion Box

Expansion Box Technical Specifications



Marker type	8-bit word
Physical marker interface	D-Sub DB9 female
Electrical marker interface	3-30V will pull a bit high
Marker accuracy	22 us delay from electrical signal change until marker time-stamped
Power supply	Powered from the eye tracker connection
Eye tracker compatibility	All new generation Auroras with ‘smart eye’ print on the front
Compatibility	Chronos (Psychology Software Tools) StimTracker (Cedrus)
Dimensions	Width 104mm Length 135mm (incl. connectors) Height 34mm (incl. feet)
Weight	258g

Contact us:
smarteye.ai/contact