

iView X™ Hi-Speed 1250

Highest Performance Eye Tracking

- ➔ Scientific-grade data quality
- ➔ Monocular & binocular
- ➔ Up to 1250 Hz
- ➔ Immediate Results



The solution

The Hi-Speed 500/1250 system offers a sampling rate of up to 1250Hz and processing latencies less than 0.5 ms. The system combines high-resolution camera technology and advanced image processing algorithms with SMI's successful and market-approved head support design while combining subject comfort, operational efficiency, and measurement data quality:

- Robust and reliable eye tracking at up to 1250Hz
- High tolerance for glasses and contact lenses
- Comfortable design with ergonomic chin rest and large and unobstructed visual field
- Monocular and binocular measurements without any loss in resolution and accuracy
- Streamlined integration with SMI Experiment Suite 360°™ for stimulus delivery and powerful data analysis
- Easy integration with various stimulus packages (e.g. NBS Presentation®, PST E-Prime®, Superlab™)
- Compatible with EEG systems



The results

The Hi-Speed 500/1250 system records all relevant data and allows for efficient control and analysis:

- Measures gaze position (x/y) in screen pixels or millimeters
- Measures pupil size (relative and absolute dimensions)
- Performs automatic on-line analysis of user-defined areas of interest (AOI) within visual field
- Provides advanced data analysis (saccade analysis, fixation sequence, area of interest analysis, attention map) with separate BeGaze™ analysis software
- Exports recorded data to ASCII for post-processing using statistical software (e.g. MATLAB®, SPSS®, Excel™)

Specifications Hi-Speed 1250

Technology

- Non-invasive, video-based eye tracking
- Monocular and binocular dark-pupil tracking, pupil/pupil-CR

Performance

- Sampling rate 1250Hz / 500Hz (monocular)
500Hz (binocular)
- Tracking resolution 0.01° (typ.)
- Gaze position accuracy 0.25 - 0.5° (typ.)
- Processing latency <0.5 msec
- System latency <2 msec (typ.)
- Viewing angle (hor./vert.) ± 30° / 30° (up), 45° (down)

System

- Workstation Desktop / Tower PC

Interface

- Genuine SMI ergonomic design with Integrated camera adjustments
- Height-adjustable chin rest (removable for SpeakAloud™ option)
- Easy-to-clean parts
- Head accessible for simultaneous use of recording and stimulation devices (e.g. EEG electrodes, magnetic coils)

- SpeakAloud™ option for out-loud reading with removed chin rest

Auxiliary Devices / Communication

- Analog Output
- Free SDK/API
- Easy integration with third-party stimulus and analysis packages such as Presentation®, E-Prime®, Superlab™, MATLAB®, SPSS®, Excel™ and others
- Compatible with EEG

Software

- SMI Experiment Suite 360° (incl. BeGaze™ & Experiment Center™)

System Options

- Combosystem with iView X RED, RED250, RED500, HED, MRI, MEG, etc.
- Application Programming Interface (API)

Norm compliance

- CE, EMC, Eye Safety

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