

RED500

Technical Specification



Human interface design	Contact-free, remote-controlled infrared eye camera with automatic eye and head tracker Modular design - integrated with 22" widescreen monitor (19" optional) and stand-alone setup for TV and projections
Eye tracking principle	Non-invasive, image based eye tracking Pupil with corneal reflection
Temporal resolution	500Hz binocular (250Hz, 120Hz, 60Hz)
Spatial resolution	0.03°
Gaze position accuracy	<0.4° (typ.)
Operating distance	60cm-80cm (subject to Eye Tracking Device)
Tracking range (head box)	40x40cm at 70cm distance
System latency (end to end)	<6ms (typ.): 500 Hz; <10ms (typ.): 250Hz; <17ms (typ.): 120Hz; <25ms (typ.): 60 Hz
Processing latency	<1.5ms (typ.)
Gaze tracking range	40° horizontal (+/- 20°), 60° vertical (+ 20/- 40°)
Eyewear compatibility	Works with most glasses and contact lenses
Real-time operator feedback	Gaze position, pupil diameter, pupil position, corneal reflex position, tracking status, eye image
Digital data access	Network connection (Ethernet/UDP), serial port (RS-232), Optional Direct AOI™ port (16-channel TTL I/O)
Norm compliance	CE Declaration of Conformity Electrical Safety EN61010-1:2001 Eye Safety EN60601-1-2 + EN55011, class B

SensoMotoric Instruments GmbH
Warthestr. 21
14513 Teltow
Germany
Phone: +49 (3328) 39 55 - 10
Fax: +49 (3328) 39 55 - 99

SensoMotoric Instruments, Inc.
28 Atlantic Avenue
236 Lewis Wharf
Boston, MA 02110 USA
Phone: +1 617 - 557 - 00 10
Fax: +1 617 - 507 - 83 19



www.smivision.com