Portable autorefractor for eyeglasses prescription

Country of origin | India

Primary function | Diagnosis

Health problem addressed

Over 1 billion people suffer from poor vision (uncorrected refractive errors, URE) because they do not have the prescription eyeglasses necessary for vision correction. Over 153 million people have severe visual impairment, >90% of which live in developing countries. URE is also the second leading global cause of blindness even though effective treatment is simply an appropriate pair of eyeglasses. URE has been identified as a priority condition within VISION 2020, a WHO global initiative.

Disease addressed

Diseases of the eye and adnexa.

Product information

The portable autorefractor aids a user (optometrist or technician) to quickly determine what eyeglasses a patient needs by objectively measuring the patient's refractive errors. The device utilizes the same optical principle that is used to guide laser-assisted in situ keratomileusis (LASIK) surgery — wavefront aberrometry. The device passes a low intensity beam light into the patient's eye, which, after bouncing back off the retina, is collected and analyzed to determine the refractive error of the eye.

Use and maintenance

User: Untrained individual, technician, nurse, general physician, specialized physician, optometrist, optician.

Training: The trainee will first be shown a short instructional video illustrating how to use of device. The device will then be used on the trainee to provide experience from the patient's point-of-view. The trainee will then obtain hands-on experience by using the device test subjects. Overall, a complete training session is expected to take less than one hour.

Environment of use

Setting: Rural settings, urban settings, outdoors, indoors, at home, public places (market, library, etc.), primary level (health post, health centre), secondary level (general hospital), tertiary level (specialists hospital), ambulances, anywhere.

Energy requirements: Replaceable batteries, continuous power supply.

Commercial information

Reference price (USD): 1600

Model: E-See/ QuickSee

Contact Dave R. Shivang | Telephone +1 617 862 2203 | Web https://bit.ly/2O0dom6