

Prism difference test equipment

Description:

As described in several European and other standards, except instead of the white light source, we use a Helium Neon laser. This makes for a more compact arrangement and easier setting-up on site.

The laser beam is expanded and projected on to the eye protector which is mounted on a standard headform located 2m away.

The headform has holes drilled through from front to back at each eye position, at a pupillary distance of 64/54mm (adult/child). Located within the headform is the aperture plate for the eye positions and the 1000mm focal length lens.

A target is mounted 2m away from the headform and the laser dots are focused on it. The displacement of the dots is then measured and the prismatic difference calculated.

A kit to perform tests to ANSI Z81.1-2010 is also available. This consists of an additional headform without the lens, and two externally mounted lenses and aperture plate.



Optional items:

Wall mounting kit
Floor standing kit

Additional EN 168 child head
ANSI Z87-1:2010 kit

Relevant standards:

EN 167:2001, clause 3.2.2 and figure 2
ANSI Z87.1:2010, clause 9.5.2 and figure E6
AS/NZS 1337-1:2010, appendix G and figure G1
ISO 12311:2013
ISO 12312-1:2013, Part 1

Services required:

Bench, wall or floor mounted – 4.7m long space required
110/230 volts AC, 50/60Hz, mains electricity

Approximate packed size & weight:

110 x 60 x 40 cm : 120 kg = bench and wall mounted versions
265 x 40 x 40 cm : 120 kg = floor mounted version