

**Huvitz** Re:define, Re+create

Vision Screener

# HVS-1



Innovative  
Ophthalmology  
Solutions



# HVS-1

## Rapid Vision Screening for Infants and Toddlers, in Less Than a Second! More Accurate with Higher Light Intensity!

Our device can quickly and accurately measure individuals from infants over six months of age, who do not like to sit in front of a desktop autorefractometer, or to adults with limited mobility. It assesses refractive errors within a second from a distance of 1 meter, making it useful for detecting risks of amblyopia, such as myopia, hyperopia, astigmatism, and strabismus.

Especially for infants and toddlers, where the easy and early diagnosis is crucial for eye development, our patented Focus LED technology measures more precisely with higher light intensity.

Experience easy and convenient testing with Huvitz's Vision Screener.



## Quick and Comfortable Measurement

### Non-contact measuring in one go

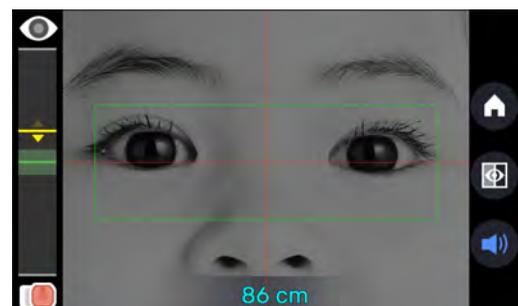
Measures refractive abnormalities like myopia, astigmatism, hyperopia, and strabismus within a second from 1 meter, similar to taking a photo. Infants who cannot sit alone can be measured while held by a guardian, and elderly with mobility issues can be measured comfortably without moving.

### Child-friendly measurement method

Attracts the child's gaze and interest with light and sound to focus on the center of the vision screener.

### Minimized shaking during measurement

A global camera sensor helps to minimize shaking during the quick measurement process.



Measurement Screen



Bright screen  
wide viewing angle



Easy connectivity  
with various devices



Screening  
report

## Reliable Test Results

### Accurate measurement with Focus LED technology

Measures the eyes precisely and in detail, minimizing the influence of external light using patented Focus LED technology with increased LED intensity.

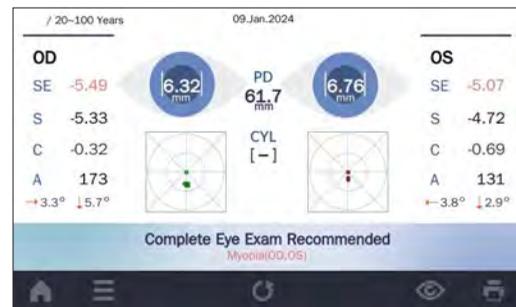
\*Use in a dark place is recommended for even higher data accuracy.

### Enhanced measurement precision

High-resolution camera and advanced optometric measurement algorithms using a quad-core CPU provide more precise optometric data.

### Trustworthy analysis results

Offers reliable analysis by evaluating the reflection of light from the retina, identifying refractive and ocular alignment abnormalities.



Result Screen



Network in Huvitz Integrated Image Server(HIIS-1)



Screening report

## User-Centered Convenience

### Clear, wide-angle IPS monitor

Bright screen and wide viewing angle of the IPS monitor panel allow users to see data clearly from any angle.

### Easy connectivity with various devices

Not only easily compatible with the standard DICOM format but also allows checking measured data on a PC through the self-developed software, HIIS-1

### Screening report provision and convenient printing method

Report information can be printed conveniently without cables using the optional Bluetooth printer.

### Various data transmission methods and fast search and management

A database of up to 7,000 individuals can be quickly accessed and searched by page, and bulk data transfer to a computer is possible via various methods (USB/cable/WIFI).



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## Vision Screener

### Specifications

|                    |   |  |                          |
|--------------------|---|--|--------------------------|
| Spherical          | Range                                       | -8.0D to +8.0D                           |                          |
|                    | Increment step                              | 0.01D, 0.25D                             |                          |
|                    | Accuracy                                    | -3.50D to +3.50D                         | ± 0.5D                   |
|                    |   | -8.0D to < -3.50D<br>> +3.50D to +8.0D   | ± 1.0D                   |
| Cylindrical        | Range                                       | -3.0D to +3.0D                           |                          |
|                    | Increment step                              | 0.01D, 0.25D                             |                          |
|                    | Accuracy                                    | -1.50D to +1.50D                         | ± 0.5D                   |
|                    |   | -3.00D to < -1.50D<br>> +1.50D to +3.00D | ± 1.0D                   |
| Axis               | Range                                       | 0 – 180°                                 |                          |
|                    | Increment step                              | 1°                                       |                          |
|                    | Accuracy                                    | ± 10°                                    | For CYL's values > 0.50D |
| Pupil size         | Range                                       | 4.0 – 9.0mm                              |                          |
|                    | Increment step                              | 0.1mm                                    |                          |
|                    | Accuracy                                    | ± 0.4mm                                  |                          |
| Pupil distance     | Range                                       | 35 – 80mm                                |                          |
|                    | Increment step                              | 1mm                                      |                          |
|                    | Accuracy                                    | ± 1.5mm                                  |                          |
| Measurement time   | Average                                     | ≤ 1s                                     |                          |
| Measuring distance | Range                                       | 100cm± 5cm                               |                          |
| LCD                | IPS 800X480                                 |  |                          |
| Printer            | BIXOLON Bluetooth Thermal printer(Optional) |  |                          |
| Fixation target    | visual pattern / audible sound              |  |                          |
| wireless network   | 802.11 b/g/n                                |  |                          |
| interface          | USB 2.0                                     |  |                          |

Specification and design are subject to change without notice.



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