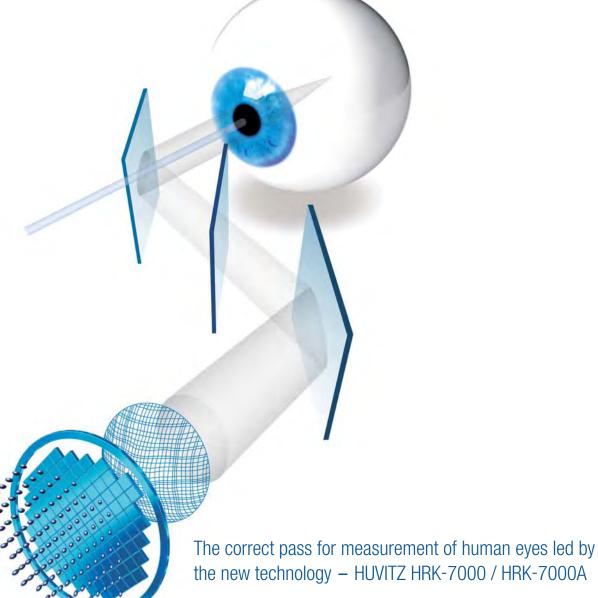# HRK–7000 / HRK–7000A
Auto Ref-Keratometer

To measure a human eye with ultra-precision, Huvitz's Wavefront Technology can be the right answer.

Human eye is unique as a fingerprint and requires a custom corrective solution. For this reason, we need fast, versatile and accurate methodologies for eye examination according to each individual customer's unique vision correction needs. HUVITZ HRK-7000 / HRK-7000A based on WAVEFRONT technology has opened up new possibilities for diagnosis of ocular error.

The correct pass for measurement of human eyes led by the new technology – HUVITZ HRK-7000 / HRK-7000A

Unlike many conventional diagnostic devices, HRK-7000 / HRK-7000A is based on Hartmann-Shack wavefront sensor, which analyzes many focal spots of a light wavefront.
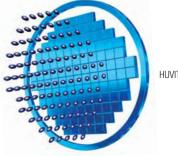It has the ability to measure not just the basic refraction error of a customer, but to obtain a spatially resolved refraction map of the wavefront.

Optimized Optical System

HUVITZ's own developed MICRO LENSLET ARRAY creates a number of separated focal spots, of which the pattern provides valuable information about customer's ocular system.

And SLD (Super Luminescent Diode) and highly sensitive CCD offers clearer images and secures accurate measurement result from ametropia, cataract and IOL.
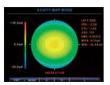
HUVITZ MICRO LENS ARRAY

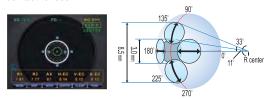### Graphical Display of Refraction Map

The graphical display of refraction errors enhances customers' understanding and reliability.

Peripheral keratometry Measurement

HRK-7000 / HRK-7000A provides peripheral keratometry measurement data that can be greatly useful for fitting contact lenses.
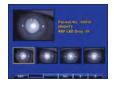
Reliable Keratometry Measurement

HRK-7000 / HRK-7000A offers reliable keratometry data using 2 mire rings, and 2 LEDs.

Retro-Illumination Mode

You can see abnormal crystalline lenses, cataracts, and scratches of corneas helping you to determine how healthy the customers' eyes are.

With increased REF power, you also can check Sph, Cyl, and Axis that cannot be measured in the normal mode.
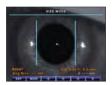
IOL Measuring Mode

HRK-7000 / HRK-7000A determines the condition of eyes automatically to detect if there are IOLs or cataracts, and measures them.

Pupil and Iris Size Measurements

HRK-7000 / HRK-7000A can measure pupil, cornea, and iris size under 14mm in diameter by freezing the image.

CLBC (Base Curvature)

Using the contact lens holder, you can measure the base curvature of contact lens.

6.5" Color TFT LCD

The 6.5" Color TFT LCD displays clear images and the image processing chip allows the LCD to show real time images.

Easy Set-Up

The user-friendly interface allows users to set the functions more easily, and the changes of settings can be done without moving the page.

Convenient One-Touch Lock

With the convenient one-touch lock, the main body can easily be fixed to the base.

High Speed Printer

The high speed printer prints out the final measurement results in 3 seconds.
The printing paper can be changed easily by adopting the one-touch paper holder.

Realization of a Total Refraction System

HRK-7000 / HRK-7000A can be connected with Huvitz Digital Refractor, Lensmeter and other devices to get data faster and have more accurate measurement result. It also can be connected with an external monitor to show the examination result to customers.

Networking System

One HRK-7000 / HRK-7000A can be connected to multiple refraction systems easily and simply.
The simple multi-networking helps to compose huge refraction centers easily.

HRK-7000A (Auto Tracking function mounted)
Auto Tracking realizes fast and accurate measurement.

Auto Tracking

The cutting edge auto sensing and 3 dimensional movement mechanism enable to track down a measuring focus of an eye automatically and complete the measurement perfectly.

Animation Guide

If a measuring focus is out of auto tracking range, the animated guide on the screen suggests how to operate the joystick in the easiest way.

Motorized Chinrest

Just by pressing Up / Down buttons, users can set the height of measuring point comfortably.

Vision Comparison Function

The internal chart provides the vision comparison of current vision and corrected vision.

HRK-7000
HRK-7000A

Image showing the Huvitz HRK-7000 connected to an external monitor(optional)

SPECIFICATION

MEASUREMENT MODE

K/R Mode	Continuous Keratometry & Refractometry
REF Mode	Refractometry
KER Mode	Keratometry
CLBC Mode	Contact Lens Base Curve Measurement
KER P Mode	Peripheral Keratometry

REFRACTOMETRY

Vertex Distanc(VD)	0.0, 12.0, 13.5, 15.0
Sphere(SPH)	-25.00~+22.00 (When VD=12mm) (Increments: 0.12 and 0.25D)
Cylinder(CYL)	0.00~10.00D (Increments: 0.12 and 0.25D)
CLBC Mode	1~180° (Increments: 1°)
Cylinder Form	−, +, ±
Pupil Distance	10~85mm
Minimum Pupil Diameter	⌀ 2.0mm

HRK-7000A MOVEMENT RANGE

Up-Down	± 15mm
Left-Right	± 5mm ± 2mm
Forward-Backward	± 5mm ± 2mm

KERATOMETRY

Radius of Curvature	5~10.2mm (Increments : 0.01mm)
Corneal Power	33.00~67.50D (When corneal equivalent refractive index is 1.3375) (Increments : 0.05/0.12/0.25D)
Corneal Astigmatism	0.00~ -15.00D (Increments : 0.05/0/12.0/25D)
Axis	1~180° (Increments : 1°)
Pupil, Iris Diameter	2.0~14.0mm (Increments : 0.1mm)
Memory of Data	10 measurements for each eye

OTHERS

Internal Printer	Thermal Line Printer
Power Saving	Automatic switch-off (5 min)
Display	6.5 inch Color TFT LCD
Power Supply	AC100-240V, 50/60Hz (Free Voltage) 60W
Dimension	252(W) x 500(D) x 432(H)mm / 20kg

Desings and details can be changed without prior notice for improvements.