HUVITZ

HUVITZ AUTO REF-KERATOMETER HRK-8000A

WAVEFRONT TECHNOLOGY

with Wavefront Technology
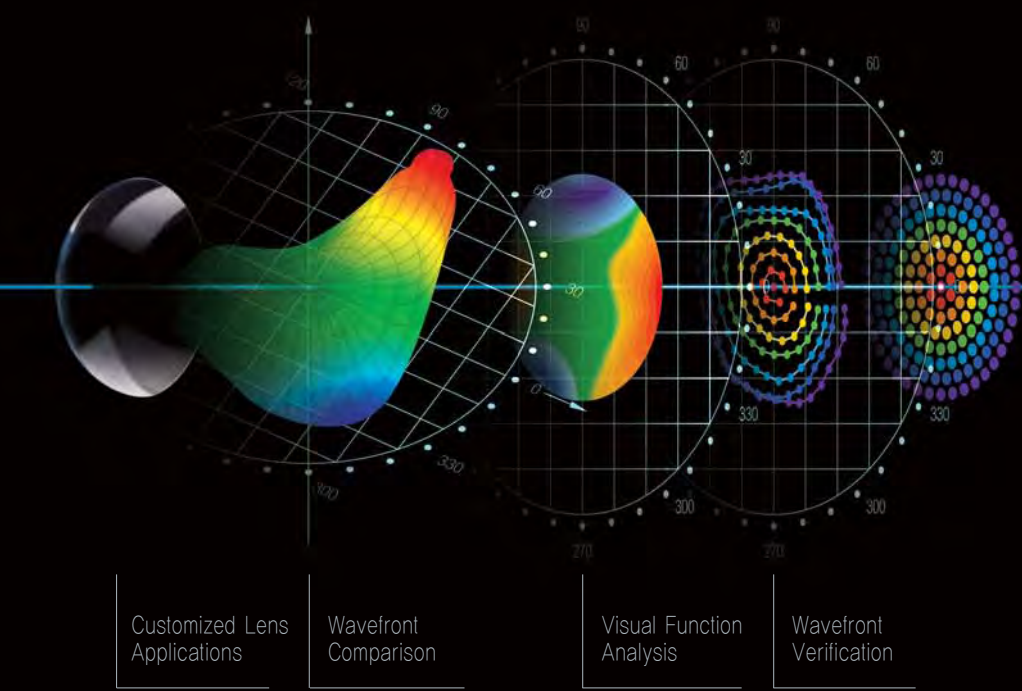
AUTO REF-KERATOMETER
HUVITZ

Extreme Precision & Accuracy!
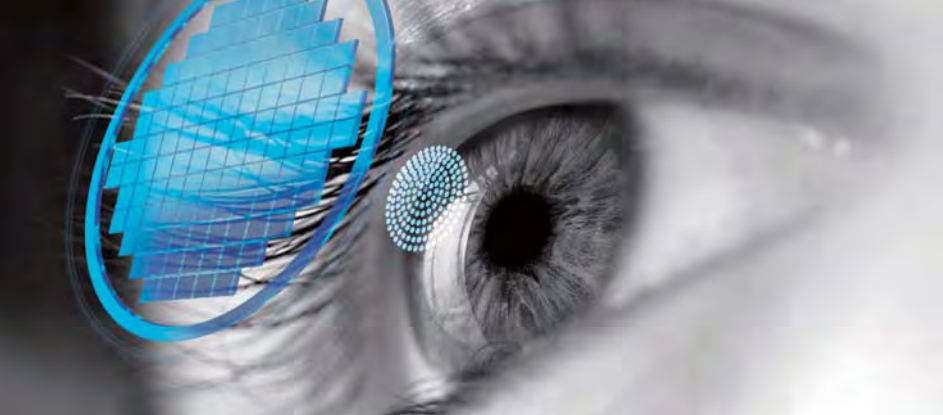Most Advanced Wavefront Technology,
HRK-8000A

Unlike many conventional diagnostic devices, HRK-8000A 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.

The new HRK-8000A utilizes a unique wavefront analysis algorithm and surpasses conventional and simple refraction offering added values with high order aberration data output for customized lenses and observation of patients before and after refractive surgery.

Experience the whole new wavefront Auto Ref-Keratometer form Huvitz, HRK-8000A!

| Customized Lens Applications | Wavefront Comparison | Visual Function Analysis | Wavefront Verification |

High Order Aberrometry Data Output Opens Possibilities for High Market Trended Customized Lens Applications!

Optimized Optical System

Hartman-Shack Micro-Lenslet Array

Wavefront Technology measures the wavefront of light reflected from the retina and the refractive power with various sensors divided by sectors and analyzes them with extreme precision.

Micro Lens Array

Huvitz' own developed Micro Lens Array creates a number of separated focal spots, of which the pattern provides valuable information of the customer's ocular system.

Customized Lens Manufacturing

High order aberration and Zernike map data output function allow premium custom spectacle or contact lens manufacturers to improves vision accuracy and power.

More Data on Aberration Measurement

High order aberration data such as Coma, Trefoil, Spherical Aberration, Secondary Astigmatism, and Tetrafoil, which was only available in wavefront aberrometers, now is available in Huvitz HRK-8000A!

Clinical usage of this data is all in your hands!

High Order Aberration Map is on!

Besides the conventional data such as Spherical, Cylinder and Axis, the high order aberration data is displayed in a graphical Zernike refraction map for better understanding of patient's eyes and superior clinical decision making.
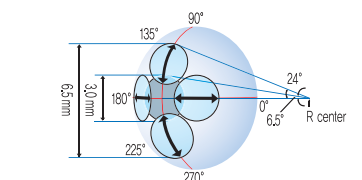
PSF & Image Simulation

Point Spread Function (PSF) and chart simulation of retinal display can make patients understood in a much better way of their clinical status of eyes and customized lens benefits.

The World's First Contact Fitting Guides and Recommendations!

Color View Mode!

The Full Color CCD camera and white LED light source in the auto ref-keratometer enable you to see eyes and contact lens fitting status which was previously only possible with slit lamps.

Peripheral Keratometry Measurement

HRK-8000A provides peripheral keratometry measurement data that can be greatly useful for fitting contact lenses.

Ultra High Precision KER Data

Mire ring and LED sources enable highly reliable keratometry data of the corneal base curve to be obtained.

Contact Lens Fitting Assistance Guide

The World's First contact lens fitting function in an auto ref-keratometer enables you to see fluorescein liquid with blue illumination.

The HRK-8000A also analyzes and simulates the lens fitting status with automatic calculation and recommendation.

Contact Lens Prescription Guide

Image capture and contrast regulation is possible.

The HRK-8000A gives you the best On-K fitting guide based on the base curve and KER value measured!

Unmatched Performance & Speed Provides Comfortable User Environment.

Touch & Tilting Color Display Screen

High brightness and contrast VGA 7" wide color TFT LCD screen provides with high resolution video images.

Smooth and free tilting function also offers you a comfortable and clear view at any angle.

Auto Tracking

The cutting edge auto sensor and 3 dimensional movement mechanism enables you to track down a measuring focus of an eye automatically and complete the measurement perfectly even with an inexperienced user.

Animated Guide

In case a measuring point is out of auto tracking range, the animated guide on the screen suggests how to operate the joystick in the easiest and most intuitive way.

Vision Comparison Function

The internal chart provides a vision comparison function of current vision and corrected vision.

Motorized Chin Rest

Just by pressing the Up & Down buttons, users can set the height of the measuring point comfortably and quickly
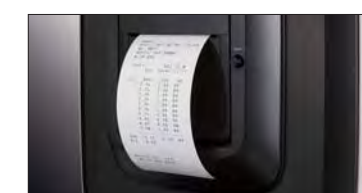
Faster Measurement Speed

Faster measurement speed than any other competitors' equipment!

Comfortable One Touch Lock

The upper moving stage can be locked easily with the one touch button, making locking smooth and easy.

Quiet & Speedy Auto Cutting Printer

Automatic paper cutting and one touch paper roll change functions are new advantages of the HRK-8000A.

Ext. Monitor & Network Connectivity

Full HD video output through the HDMI port provides a differentiated explanation base for clinical consulting with your patients.

HRK-8000A supports network connectivity with Huvitz Digital Refraction System enabling easy and fast refraction in networking.

Image showing the Huvitz HRK-8000A connected to an external monitor(optional)

HRK-8000A

HUVITZ AUTO REF-KERATOMETER

SPECIFICATIONS

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
Color View Mode	Color View & Contact Lens Fitting Assistance (White & Blue LED Light)

REFRACTOMETRY

Vertex Distanc(VD)	0.0, 12.0, 13.5, 15.0
Sphere(SPH)	-30.00~+25.00 (VD=12mm) (Increments：0.01, 0.12, 0.25D)
Cylinder(CYL)	0.00±12.00D (Increments 0.01, 0.12, 0.25D)
CLBC Mode	1~180° (Increments：1°)
Cylinder Form	−, +, ±
Pupil Distance	10~85mm
Minimum Pupil Diameter	∅2.0mm

KERATOMETRY

Radius of Curvature	5.0~13.0mm (Increments：0.01mm)
Corneal Power	25.96~67.50D (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	0~180° (Increments：1°)
Pupil, Iris Diameter	2.0~14.0mm (Increments：0.1mm)
Memory of Data	10 measurements for each eye

MOVEMENT RANGE

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

OTHERS

Display	7 inch Wide Color TFT LCD, Touch panel with Tilting function
Internal Printer	Thermal Line Printer with Auto Cutting function
Power Saving	Automatic switch-off(5min)
Power Supply	AC100-240V, 50/60Hz(Free Voltage), 60W
Dimension／Weight	262(W) x 518(D) x 441(H)mm / 20.9kg

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