

# MRK 3100P AUTO REF-KERATOMETER











Each examination methods should depend on the customer's eyes.



How would you measure each person's different eyesight? It will be difficult and not entirely accurate to measure every eye with the same method. We can support you with our MRK-3100P which is Huvitz's latest optic technology to measure refractive power, the curvature of the cornea, and also has support for the measurement of the pupil, cataracts, IOL, and a Retro-Illumination feature.

The MRK-3100P helps you with delicate variable measurements even though the customer has microscopic differences; the MRK-3100P detects and measures the differences.



Even though there are microscopic differences in the customer's eyes, the MRK-3100P will be able to measure it. Variable measuring processes consider the condition of the eyes.

#### **Retro-Illumination Mode**

- You can see abnormal crystalline lenses, cataracts, corneas, and scratches on the contact lens with the IR (Infra Red) light that is reflected from the retina. Using this mode, you can determine how healthy the customer's eyes are.
- We can examine the eyes very precisely because the MRK-3100P supports 4 images (2 images from each eye) and the operator can compare all 4 images at once.
- The Retrolllumination mode is basically for looking at the eyes. In addition, it is possible for the information to be displayed as Sph, Cyl, Axis, of the eyes.



#### Position and Focus Indicator

If the eye is in position and in focus, a mark shows up and the operator can measure the eye. The mark follows the position of the eyes, indicating to the operator which way he needs to make adjustments.



#### IOL Measuring mode

The MRK-3100P determines the condition of the eyes automatically to detect if there are IOL's or cataracts, and measure them.

#### Pupil, Cornea, Iris Size measurements.

The MRK-3100P can measure under 14mm by freezing the image.



#### PD Measurement

During the Binocular measurement, the PD is automatically measured and printed.

Wider range

- SPH Power (-25D +22D)
- CYL Power (-10D +10D)

## CLBC (Base Curvature)

Using the contact lens holder, measure the base curvature of contact lense.

Delicate and Convenient – Reliability of the measurements will be higher.





#### High resolution monitor

5.5 inch monitor is clean and bright, displaying a clear image.

## Beautiful, clear font

The font is easy to read and stands out, no matter what the background color is. The MRK-3100P supports multilingual menus (English, Chinese, and European languages).

### High speed printer

The high-speed printer prints out the final measurement results in 3 seconds. A printing icon appears on the monitor while printing is in process. The printing paper can be changed easily



#### Automatic power-saving function

The system shuts off by itself automatically without the operator having to tell it to do so. The time to shutdown can be changed by the operator in the user setting window. This feature saves energy and prevents overheating.

#### One-touch keypad

Our keypad displays icons and pictures on the buttons so it is easy to understand and operate. The operator can program buttons for different operations; the process to define new keys is very easy.



### **Convenient System Lock**

Use the lock to prevent the system from shifting with just a half turn of the locking device. Once locked, the upper stage of the machine will not move.

A Perfect Network of Refraction system – Easier to control the customer's data.

# Realization of a Total refraction System

Our MRK-3100P can be connected with our own Lensmeter, automatic refraction system(HRS-3100) and other devices to get data faster and have more accurate measurements. One MRK can be connected to multiple refraction systems easily and simply.



Accurate and Delicate ! You will be closer to the eyes of the customer with the MRK-3100P which is certified and acknowledged by the world.

HUVITZ

# World Certified \_\_\_\_\_\_ Toward the best in the world !

Huvitz has certifications from the FDA, CE, and the ISO 9002 as the company that designed the Ref-Keratometer. The MRK-3100P, designed by the newest technology is exported to all of the world effectively measuring the eyes of the world.

## Latest Optic Technology \_\_\_\_\_\_ Variable, Precise Ref/Keratometer !

The MRK-3100P measures cornea curvatures, the iris, cataracts, Intraoccular lenses (IOL), CLBC, and the base curvature. All the measuring is accomplished with our wide ranged diopter.

Easy to use, convenient to measure !

The MRK-3100P is so easy to use; there is almost no need for a user's manual, making it very convenient and comfortable for the operator as well as the customer.

# SYSTEM NETWORKING



# SPECIFICATIONS

#### Measurement Mode

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

# Refractometery

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

# Keratometery

Radius of Curvature	5.0 ~ 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°)
Corneal 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	5.5 inch (Black & White) CRT
Power Supply	AC100-240V, 50/60Hz (Free Voltage, Free Frequency)
Dimension	300(W) X 500 (D) X 430 (H) mm
Weight	21kg

Designs and details can be changed without prior notice for its improvements.