

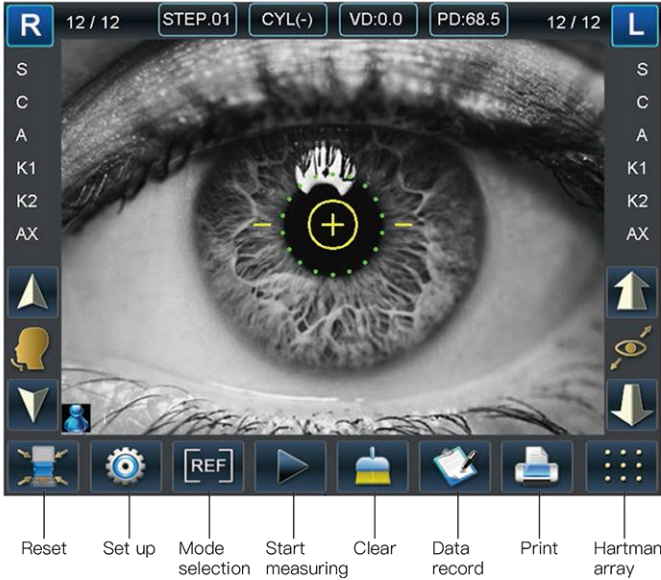
RM-850/RK-850 Auto Ref/Keratometer

Feature:

- Humanized detail design
- Comfortable operation and smooth measurement
- Adjustable LCD screen for convenient measurement
- Hartmann's Principle
- New light path design, clear human eye imaging effect
- The screen can be rotated freely up and down
- Automatic eye tracking for lifting, automatic measurement
- Electric lifting amount tow
- Off-speed printer
- High-speed image acquisition system, advanced image processing and analysis



Operation Interface Function



Adjustable LCD Touch Screen



High brightness and contrast 8" wide color TFT LCD screen, smooth touch mode, different angle can be adjusted

Motorized Chin Rest



By pressing the Up & Down buttons, the users can set and adjust the height of the patient's chin freely and quickly

Data Record



3 groups of data stored each measurement, maximum 10 groups of data can be stored

Technical Data

Corneal apex distance:	0.0, 12.0, 13.75, 15.0
Spherical mirror degree:	-20.00D ~ + 20.00D (VD = 12mm, 0.01, 0.06, 0.12, 0.25 units)
Cylindrical power:	0.00D ~ + 10.00D (0.06, 0.12, 0.25 units)
Axis position:	10 ~ 180 ° (1 ° unit)
Astigmatism symbol:	-, +, ±
Interpupillary distance:	10 ~ 86mm
Minimum pupil diameter:	2.0mm
Pupil diameter:	2.00-8.00mm
Measure light energy:	<30uw (ensure measurement safety)
Cornea curvature radius:	5.0 ~ 10.0mm (0.01mm accuracy)
Cornea diopter:	33.00D ~ 67.0D (when the corneal equivalent diopter is 1.3375)
Corneal astigmatism:	0.00D-15.00D (0.06D / 0.12D / 0.25D units)
Stored data:	10 measurements each
Axis position:	1 ° ~ 180 °
Visual target:	Guided cloud map
Display:	8-inch TFT touch screen (adjustable viewing angle)
Printer:	57mm thermal printer
Power supply:	AC 100 ~ 250V, 50 / 60Hz, wide power supply
Net weight:	22 kg
Gross weight:	26.5 kg
Packing size:	(length) 680mm x (width) 400mm x (height) 640mm

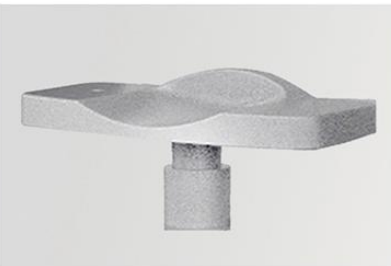
RM-900/RK-900 Auto Ref/Keratometer

Feature:

- 9 inch Adjustable touch screen LCD for convenient measurement
- Electric lifting throat mold
- Switch button
- Automatic paper cutting printer
- Comfortable operation and smooth measurement
- Comfortable operation and smooth measurement
- Precision and Accuracy
- Image analysis
- Processing technology



USB interface
and RS232 interface



Electric lifting throat mold
Running smoothly
Flexible operation
Experience is good



Electric lift
Sensitive operation
Running smoothly



Automatic cutting
Built-in thermal printer
to replace
paper easy to print
automatically cut paper

Technical Data	
Corneal Vertical Distance(VD):	0.00mm,12mm,13.75mm, 15mm
Spherical diopter:	-20.00D-+20.00D(VD=12MM,0.01,0.06,0.12,0.25units)
Cylindrical diopter:	0.00D -±10.00D(0.06 0.12 0.25units)
Axis position:	1~180*(1 °unit)
Astigmatism symbol:	-,+,±
Axis:	1°~180*(1°unit)
Pupil Distance:	10mm~85mm(0.01mm unit)
Radius of Corneal Curvature:	5.0~10.0mm(0.01mm unit)
Corneal diopter	33.00D- 67.00D(When the corneal equivalent diopter is 1.3375)
Corneal Astigmatism:	0.00D~15D(0.06,0.12,0.25unit)
Display:	9 inch TFT touch screen (adjustable viewing angle)
Printer:	57mm thermal printer
Measurement completion time:	<0.5s
Visual target:	Guided cloud map
Power supply:	AC100~240V,50/60Hz
Power dissipation:	60AV
Net weight:	24kg
Gross weight:	29kg
Box size:	(L)740mm*(W)440mm*(H)600mm

RM-950/RK-950 Auto Refracto-Karatometer

Feature:

- New light path design
- Smooth image analysis
- Accurate measurement results
- Perfect imaging quality
- Mature processing technology
- Electric paper cutting thermal printer
- Powerful and easy to operate
- Leading technology at home and abroad
- Free rotation: 360° or 180° adjustable touch LCD screen
- Electric lifting throat mold
- Automatic tracking and focusing
- 3D intelligent measurement
- VGA function display diagram

360 ° rotation



180 ° rotation



Technical Data

The measurement range of vertex power:	- 25D~+25D
The measurement range of cylinder diopter	- 10D~+10D
Cylindrical diopter:	0.00D ~± 10.00D (0.06012, 0.25 units)
The measuring range of cylindrical axial:	0 0~180.
Corneal diameter:	1.0 ~ 12.00 mm
Pupil distance:	10~ 85mm
Minimum pupil diameter:	1.0mm
Measurement completion time:	< 0.5 seconds
Measured optical energy:	< 30uw (to ensure measurement safety)
Corneal curvature radius:	5.0~10.0mm (0.01mm accuracy)
Corneal diopter:	33.75D ~ 67.5D (when the corneal equivalent diopter is 1.3375)
Sight mark:	guiding cloud map
Stored data:	10 measured values on the left and right sides
Data transmission:	RS32 \ Bluetooth, WIFI, etc
Display:	10.4-inch TFT touch screen (adjustable angle of view)
Printer:	57mm thermal printer, automatic paper cutting
Power supply:	AC100 ~ 250V, 50/60Hz, wide power supply

Detailed technical points

Eyes move into the screen →



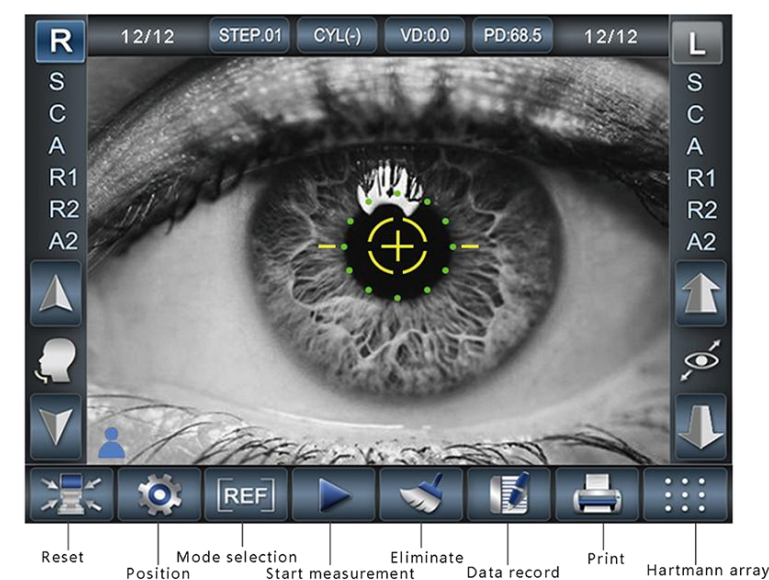
Automatic tracking and focusing



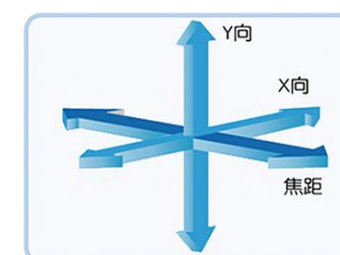
Automatic measurement



Operation interface function



3D intelligent measurement



Electric jaw lifting rest



The upper and lower switches of the operation panel can quickly and reasonably adjust the height of the measurer's jaw

VGA function display diagram



Automatic paper cutting



Built-in thermal printer, easy to replace paper sheet, automatic paper cutting after printing

FA-6500 Auto Refractometer

Models:

- FA-6500A: Auto Refractometer only
- FA-6500K: Auto Refractometer with Keratometer

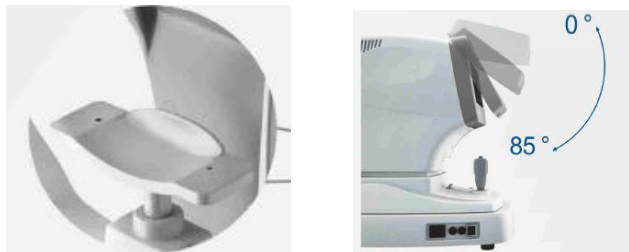
Feature:

- 7" TFT LCD monitor:
- Bigger better monitor, icon display,menu for easier operation and setting;
- Motorized joystick: A Motorized joystick with auto-tracing mode is adopted, so operation is easier;
- Tilting screen function that allows wide variance of access.
- Auto focus function,just move, it will automatically focus the eye and get the value.
- Refractive measurement with hexagon prism,with high quality of hexagon prism and highly sensitive CCD, it provides unmatched accuracy and reliability.



FA-6500A/FA-6500K

FA-6800A/FA-6800K



Technical Data	
Refractometer	
Vertex distance	Omm, 12mm, 13.75mm
Spherical	-20~+20m (VD=12) 0.12/0.25m ⁻¹ Step
Cylinder	-8~+8m 0.12/0.25m Step
Axis	0-180° 1° step
Cylinder form	-, +, ±
Pupil distance	45-88mm, 1mm step
Keratometry (FA-6500K Only)	
Radius of curvature	5.0-10mm (increment:0.01mm)
Corneal Power	33.75-67.50D (when corner equivalent refractive index is 1.337) Increment selectable from 0.12,0.25D
Corneal astigmatism	0.00-8.00D (Increment selectable from 0.12,0.25m ¹)
Axis	1~180° (increment :1°)
Corneal diameter	2.0 -14.0mm (increment:0.1mm)
Others	
Chart	Follow-up Colorful Fogging Chart System
Memory of data	10 measure value for each right and left eye
Display	7" TFT LCD
Print	Thermal printer

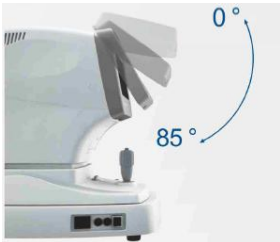
FA-8000 Auto Refractometer

Models:

- FA-8000A: Auto Refractometer only
- FA-8000K: Auto Refractometer with Keratometer

Feature:

- 9" TFT LCD monitor,Bigger, better monitor and icon-display menu
- Bigger better monitor, icon display,menu for easier operation and setting;
- Motorized joystick: A Motorized joystick with auto-tracing mode.
- New designed bracket, attractive and durable.
- Tilting screen function that allows wide variance of access.
- Auto focus function,just move, it will automatically focus the eye and get the value.
- Refractive measurement with hexagon prism,with high quality of hexagon prism and highly sensitive CCD,it providesunmatched accuracy and reliability.



Technical Data	
Refractometer	
Vertex distance	Omm, 12mm, 13.75mm
Spherical	-20~+20m (VD=12) 0.12/0.25m ⁻¹ Step
Cylinder	-8~+8m 0.12/0.25m Step
Axis	0-180° 1° step
Cylinder form	-, +, ±
Pupil distance	45-88mm, 1mm step
Keratometry (FA-8000K Only)	
Radius of curvature	5.0-10mm (increment:0.01mm)
Corneal Power	33.75-67.50D (when corner equivalent refractive index is 1.337) Increment selectable from 0.12,0.25D
Corneal astigmatism	0.00-8.00D (Increment selectable from 0.12,0.25m ¹)
Axis	1~180° (increment :1°)
Corneal diameter	2.0 -14.0mm (increment:0.1mm)
Others	
Chart	Follow-up Colorful Fogging Chart System
Memory of data	10 measure value for each right and left eye
Display	9" TFT LCD
Print	Thermal printer

FA-6000 FA-6100 FA-6100B Auto Refractometer

Models:

FA-6100A, FA-6000A, FA-6100B Auto Refractometer only
FA-6100K, FA-6000K, FA-6100BK : Auto Refractometer with Keratometer

Feature:

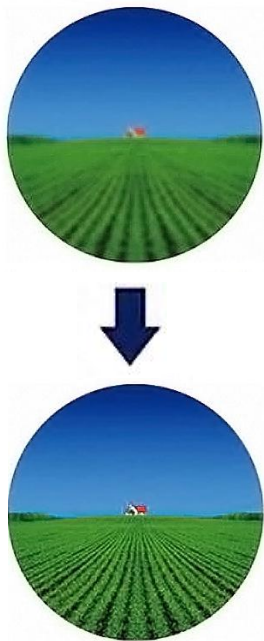
- The CRT Monitor make the measurement results and setting image display on an easy-to-view screen.
- AUTO PD measurement: The PD will be automatically calculated after measurement.
- Easy to operate, one-hand control: All operations, including UP\Down, Right\Left, Forward\Backward and Start can be easily controlled with one hand through the control stick.
- Faster and more accurate measurement.
- More broad measurement range of Min.pupil size to $\phi 2.0\text{mm}$.
- Auto I manual focus function.
- Convenient user menu setting.
- Keratometry and refractometry mode select.



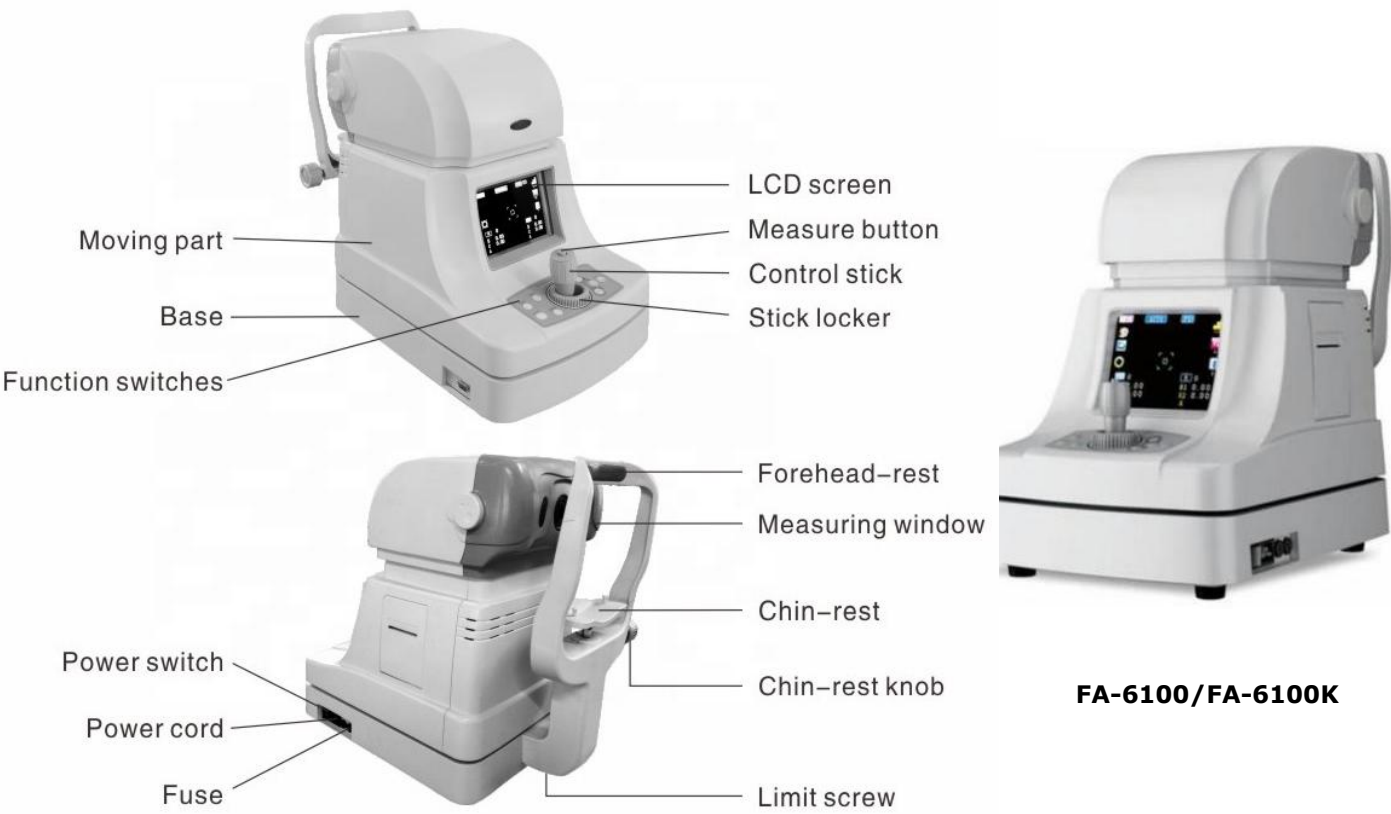
FA-6100B/FA-6100BK



FA-6000A



Auto Focusing



FA-6100/FA-6100K

Technical Data

Refractometer		Keratometry (FA-6800K Only)		Others	
Vertex distance	0mm, 12mm,13.75mm	Radius of curvature	5.0-10mm (increment:0.01mm)	Chart	Follow-up Colorful Fogging Chart System
Spherical	-20 - +20D (VD=12) 0.12/0.25m-1 Step	Corneal Power	33.75-67.50D (when corner equivalent refractive index is 1.337)	Memory data	10 measure value for each right and left eye
Cylinder	-8 - +8m-1 0.12 /0.25m-1 step		Increment selectable from 0.12,0.25D	Display	9" TFT LCD
Axis	0~180° 1°Step	Corneal astigmatism	0.00-8.00D	Print	Thermal printer
Cylinder form	-, +, +	Axis	1~180° (increment :1°)	Power Supply	220V*±10% 50Hz 60VA
Pupil distance	45-88mm, 1mm step	Corneal diameter	2.0 -14.0mm (increment:0.1mm)	Dimension	483mm*268mm*452mm
Min. pupil size	2.0mm			Weight	16kg

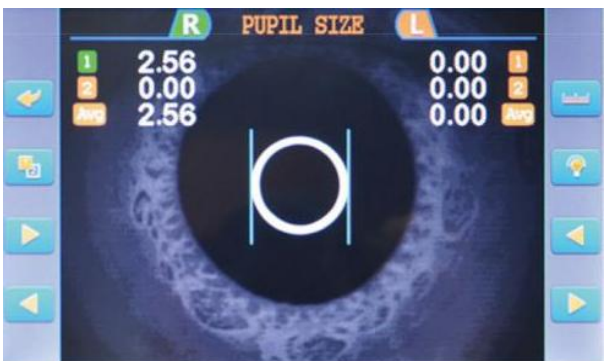
RM-9600 Auto Refractometer
KR-9600 Auto Ref/Keratometer

Feature:

- Fashion and compact design.
- Adopt the ARM Cortex-A8 processor provides faster measurement.
- Advanced refraction measurement technology, image analysis more entirely, enable the reliable measurement result and optimize date consistency.
- Automatic identification the best measurement position for keratometry,avoid the operating error and enable the accurate Keratometry measurement.
- IOL function available



Auto tracking (Y axis)



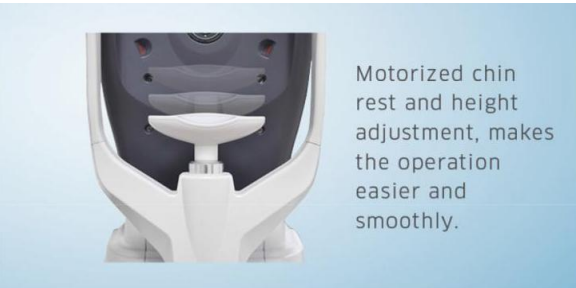
Pupil size measurement



7.0 inches touch screen, 90° angel adjustable, provide operator with comfortable viewing angle both when sit or stand.



One key lock function, convenient and practical.

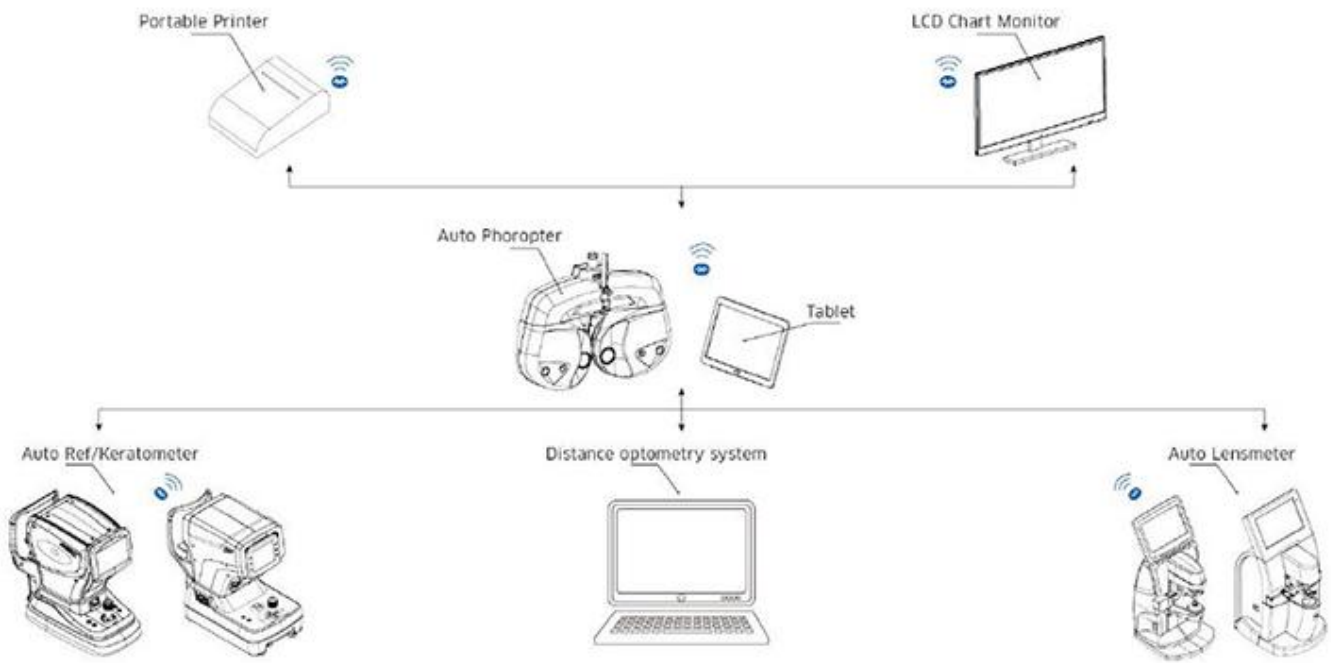


Motorized chin rest and height adjustment, makes the operation easier and smoothly.



Built-in fast thermal printer, with easy loading and auto cutter function.

Data transmission system (Bluetooth)



Technical Data of 9600

Measurement mode	K/R	Refraction/ Keratometry measurement
	REF	Refraction measurement
	KER	Keratometry measurement
Refraction measurement	Vertex Distance	0.0, 12.0, 13.75, 15.0mm
	Sphere	-25.00~+22.00DD(0.12/ 0.25D step)(VD=12mm)
	Cylinder	0.00~±10.00D(0.12/0.25 step)
	Axis	0~180°(1°step)
	Pupil Distance	10~85mm
	Minimum measurable pupil diameter	2.0mm
Keratometry Measurement (KR-9600)	Target	Automatic fogging target
	Curvature radius	5~10mm(0.01mm step)
	Refractive power	33.75D~67.50D(0.12/0.25D step)
	Cylindrical power	0.00~15.00D(0.12/0.25 step)
	Axis	0~180°(1°step)
	Corneal diameter	2.0~12.00mm
Hardware specification	Monitor	7.0 inch Color LCD
	Printer	Thermal printer with easy loading and auto cutter
	Power saving	5/15 minutes
	Data output	RS232/Bluetooth
	Power supply	AC100~240V, 50/60 HZ,50W
	Dimensions/Weight	262(W)*487(D)*467(H)mm/17.5kg

RM-9000 Auto Refractometer
KR-9000 Auto Ref/Keratometer

Feature:

- With corneal curvature and diopter measurement function (KR-9000)
- Using the ARM processor and the latest domestic image processing, the system is fast and the image is clear.
- Japan's mature optical path system, humanized automatic mist measurement process, to reduce the error caused by adjustment, more precise measurements
- Light rack with integral casting, CNC machining, measuring system is more stable, good consistency
- Color LCD display, 5.7 inches man-machine interface is more comfortable
- PD Automatic measurement function, automatically PD value
- One key lock function, quickly locking mobile platforms
- Innovative designs, accord with the structure of human body engineering, to bring customers good aesthetic feeling and comfortable



Data transmission with auto phoropter



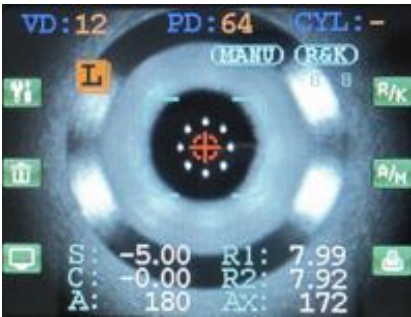
Date and time display	NAME:.....N/F
	DATE:2010-08-31 15:38
	[REF] VD:12.00
	Cyl Sign: [-]
Right eye data	(R) SPH CYL AX
	-2.50 -0.00 180
	-2.50 -0.00 180
	-2.50 -0.00 180
	Representative value
Left eye data	(L) SPH CYL AX
	-2.50 -0.00 180
	-5.00 -0.00 180
	-5.00 -0.00 180
	Representative value
PD Measurement	AVO -5.00 -0.00 180
	PD=65mm RM-9000



Fast thermal printer

Technical Data

Model	KR-9000	RM-9000
Refractive measurement	Vertex Distance	0,12,13.75,15mm
	Sphere	-20~+20D (0.12/0.25D step)
	Cylinder	0.00~+10.00D (0.12/0.25D step)
	Axis	1D-180D (1D step)
	Pupil Distance	30~85mm
	Min. Pupil diameter measurable	2.0mm
	Target	Automatic fogging target
Corneal curvature measurement	Radius of curvature	5~10mm (0.01mm step)
	Corneal Refraction	30.00~67.00D (0.12/0.25D step)
	Corneal Astigmatism	0.00~-15.00D (0.12/0.25D step)
	Angle of Cornea	1-180D (1D step)
	Corneal diameter	2.0~12.00mm
Hardware specification	Monitor	5.7 inch Color LCD
	Printer	Fast thermal printer
	Power Saving Function	OFF, 5/15 mins (Selectable)
	Power supply	AC 110~220V, 50/60HZ, 50W
	Dimensions/weight	69 (W) * 43(D)*72 (H)cm/ 21kg



5.7 inches Color LCED monitor



Intuitive Interface, convenient adjustment, VD value, precision and print mode, etc.



Automatic mist target effectively reduce error caused by adjusting



One key lock function Convenient and Practical

RM-9200 Auto Refractometer

KR-9200 Auto Ref/Keratometer

Feature:

- More fashion model, more intelligent control;
- Use the ARM processor and the latest domestic image processing, the system is fast and image is clear.
- Japan's mature optical path system, humanized automatic mist measurement process, to reduce the error caused by adjustment, more precise measurements.
- Light rack with integral casting, CNC machining, measuring system is more
- Data transmission with computerized vision tester, improved efficiency of online.
- Motorized chinrest, automatic tracing focus (Y-AXIS direction)
- Auto detachment printer
- Auto tracking optical system
- 5.7 inches tillable color LCD
- Date transmission with computerized vision tester, improved efficiency of online
- With Corneal curvature and diopter measurement function (KR-9200)



Data transmission with auto phoropter



Date and time display		NAME:.....N/F
		DATE:2013-2-20 15:51
		[REF] VD:12.00
		Cyl1.Sign: [-]
Refractive measurement	(R)	SPH CYL AX
		-2.50 -0.00 180
		-2.50 -0.00 180
		-2.50 -0.00 180
	AVG	-2.50 -0.00 180
	(L)	SPH CYL AX
		-5.00 -0.00 180
		-5.00 -0.00 180
		-5.00 -0.00 180
	AVG	-5.00 -0.00 180
Corneal curvature measurement	[KER]	INDEX:1.337
	(R)	R1 R2 AX
		8.00 7.99 180
		8.00 7.99 180
	AVG	8.00 42.00
	(L)	R1 R2 AX
		8.00 7.99 180
		8.00 7.99 180
		8.00 7.99 180
	AVG	8.00 42.00
PD measurement		mm D AX
	R1	8.00 42.00 180
	R2	7.99 42.00 90
	AVG	8.00 42.00
	CYL	PD=62mm
		KR-9200

Technical Data

Model		KR-9200	RM-9200
Refractive measurement	Vertex Distance	0,12,13.75,15mm	
	Sphere	-20~+20D (0.12/0.25D step)	
	Cylinder	0.00~-10.00D (0.12/0.25D step)	
	Axis	1D-180D (1D step)	
	Pupil Distance	30~85mm	
	Min. Pupil diameter measurable	2.0mm	
	Target	Automatic fogging target	
Corneal curvature measurement	Radius of curvature	5~10mm (0.01mm step)	—
	Corneal Refraction	30.00~67.00D (0.12/0.25D step)	
	Corneal Astigmatism	0.00~-15.00D (0.12/0.25D step)	
	Angle of Cornea	1-180D (1D step)	
	Corneal diameter	2.0~12.00mm	
Hardware specification	Monitor	5.7 inch Color LCD	
	Printer	Fast thermal printer	
	Power Saving Function	OFF, 5/15 mins (Selectable)	
	Power supply	AC 110~240V, 50/60HZ, 50W	
	Dimensions/weight	288 (W) * 500(D)*480 (H)mm/ 14.5kg	



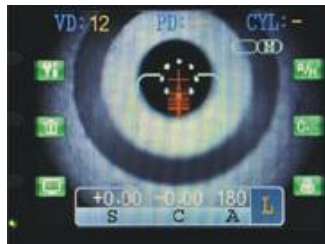
5.7 inches tillable color LCD



Electric Up/down Chin Rest



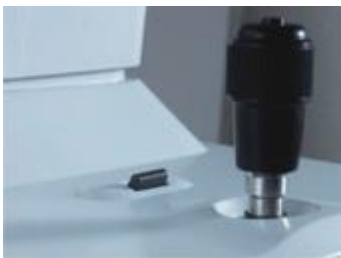
Auto detachment



Automatic tracing focus (V-Axis direction)



Automatic mist target, effectively reduce the measurement error caused by adjusting



One key lock function Convent and practical

RMK-150 Auto Ref/keratometer

Feature:



System of Vision Measuring

It can measure the keratometry and refractometry at the same time data

System of Optical measuring

The basic curvature measurement of parameters of contact lens completion of vision test data

System of Fixation

Automatic colorful vision system making your optical measuring comfortable

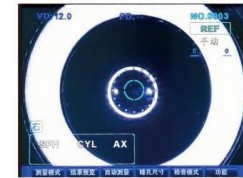
Technical Data

Measurement mode	Cornea/ refractometry measurement mode	keratometry/refractometry
	Mode of keratometry	refractometry
	Refractometry measurement mode	keratometry
	Mode of CLBC	Substrate curvature of contact lens
Refractometry	Vertex Distance	0, 10, 12, 13.5, 15mm
	Spherical degree	-25.00~+22.00D(VD=12mm, 0.12or0.25D)
	Cylinder degree	0.00~+/-10.00D(0.12 or 0.25D)
	Axial	1~180 ° (step 1°)
	Cylinder Symbol	-, +, +/-
	pupil distance	10~85 mm
	Minimum pupil diameter	φ 2.0 mm
	Measuring time	0.07sec
Keratometry	Radius of curvature	5.0 ~10. 2 mm
	Corneal refractometry	33.00 ~ 67.50D
	Corneal astigmatism	0.00 ~ -15.00D (0.05/0.12/0.25D)
	Corneal diameter	2.0 ~ 14.0 mm
Others	printer	Thermal printer
	Saving Settings	3, 5, 10 Minutes
	Monitors	
	Power	AC 100 ~ 240V,50/60HZ/90W
	Size / Weight	248(W) × 476(D) × 475(H) mm /21 kg
	Jaw panel	Max 55 mm
	Data Output	Rs-232 interface , Video output

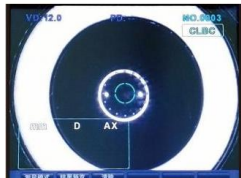
RMK-700 Auto Ref/keratometer

Feature:

- With function of REF, KER, K&R, CLBC, SIZE, RMK-700 can meet all of your measurement requirement.
- Convenient trying on mode, patient can experience the measurement result on the machine. Omitting all the trouble of trying again and again.
- Z-map measurement mode is much more vivid than traditional cornea measuring. By the result of outputing to PC, the patient can understand all the details of his vision.



REF Mode



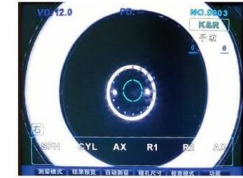
CLBC Mode



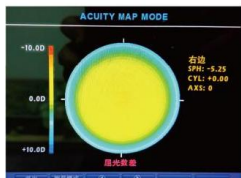
One step locking switch of body head



Convenient and sample lifting forehead rest



K&R Mode



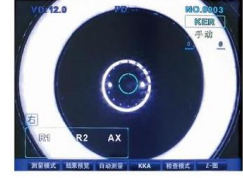
MAP Mode



Electric lifting chin rest



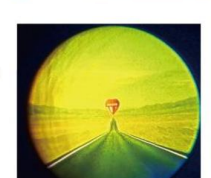
Perfect optical head and foggy system are much more accurate



KER Mode



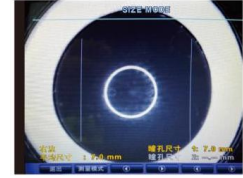
Concise menu interface



Clear foggy interface make the measuring possess more comfortable



Integrated printer is more convenient and faster



SIZE Mode

Technical Data

Vertex Distance	0.0 mm , 12.00 mm, 13.5 mm, 15.00mm
Spherical degree	-20.00D ~ +20.00D, (VD=12mm, step : 0.12 D/0.25D)
DCylinder degree	0.00 D~+ 10.00 D (step : 0.12D/0.25D)
Axis	1°~ 180 (step 1°)
Cylinder symbol	-, +, MIX
Minimum pupil diameter	2.0mm
Radius of curvature	6.5 mm ~ 94 mm (step : 0.02mm)
Printer	Thermal printer
Display	6.4 inch TFT display

AR-810 Auto Refractometer
ARK-810 Auto Ref/Keratometer

Feature:

- With Auto-tracing feature, operator can adjust the focus and alignment in up and down directions.
- With Auto videotaping feature, operator can take measurements automatically once equipment obtains satisfactory focus and alignment.
- With Servo Chin-Rest, operator can adjust height of Chin-rest easily.
- Display is tilt-adjustable.
- Printer has a paper auto-cut feature



Technical Data		
Auto Refractometer	Vertex Distance	0,12,13.75,15mm
	Sphere (S)	-20~+20D (VD=12mm, 0.12 or 0.25D Steps)
	Cylinder (C)	0.00~+/- 10.00D (0.12 or 0.25D Steps)
	Axis (A)	1-180° (steps 1°)
	Cylinder form	-, +, +/-
	Pupil Distance (PD)	30-85mm
	Minimum Pupil Diameter	2.0mm
	Measuring Ring time	0.5 sec
Auto keratometer	Radius of Curvature (ARK-810)	5.0-10mm
	Corneal refractometer(ARK-810)	33.00-67.00D
	Corneal Astigmatism(ARK-810)	0.00-15.00D(0.12/0.25D steps)
	Corneal Diameter(ARK-810)	2.0-12mm
Others	Printer	Thermal Printer
	Power Save	5, 15 Min
	Display	5.7" TFT LCD
	Auto Tracing Function Range	+/- 16mm (up and down direction only)
	Power	AC 100-240V, 50/60HZ/90W
	Jaw Panel	Max 55mm

AR-800 AR-800A Auto Refractometer
ARK-800 Auto Ref/Keratometer

Feature:

- The auto refractometers have the function of Quick measurement for dioptre of 2mm MIN. pupil size, Corneal Diameter
- Measured MOR quickly because the Technology of Bile-in Micro process and quick graphic process.
- Quick measurement for dioptre of MIN.pupil size.
- New design of colorful screen (5.7" TFT LCD).
- Auto fog chart.
- Pupil distance auto measured available; Choice for vertex distance.
- Ability of auto-measurement after aligns and focus.



Technical Data		
Measuring Range	Spherical	-20~+20D (VD=12mm, 0.12 or 0.25D Steps)
	Cylinder	-8D~+8D (0.12D steps)
	Axis	0-180D (1D steps)
Pupil Distance	45-85mm (1mm steps)	
Vertex Distance	0,12,13.75mm	
Min. Pupil Distance	2.2 mm	
Chart	Auto Fog	
Display	5.7" TFT LCD	
Print	Thermal Printer	

FR-8900 Auto Refractometer

FKR-8900 Auto Ref/Keratometer

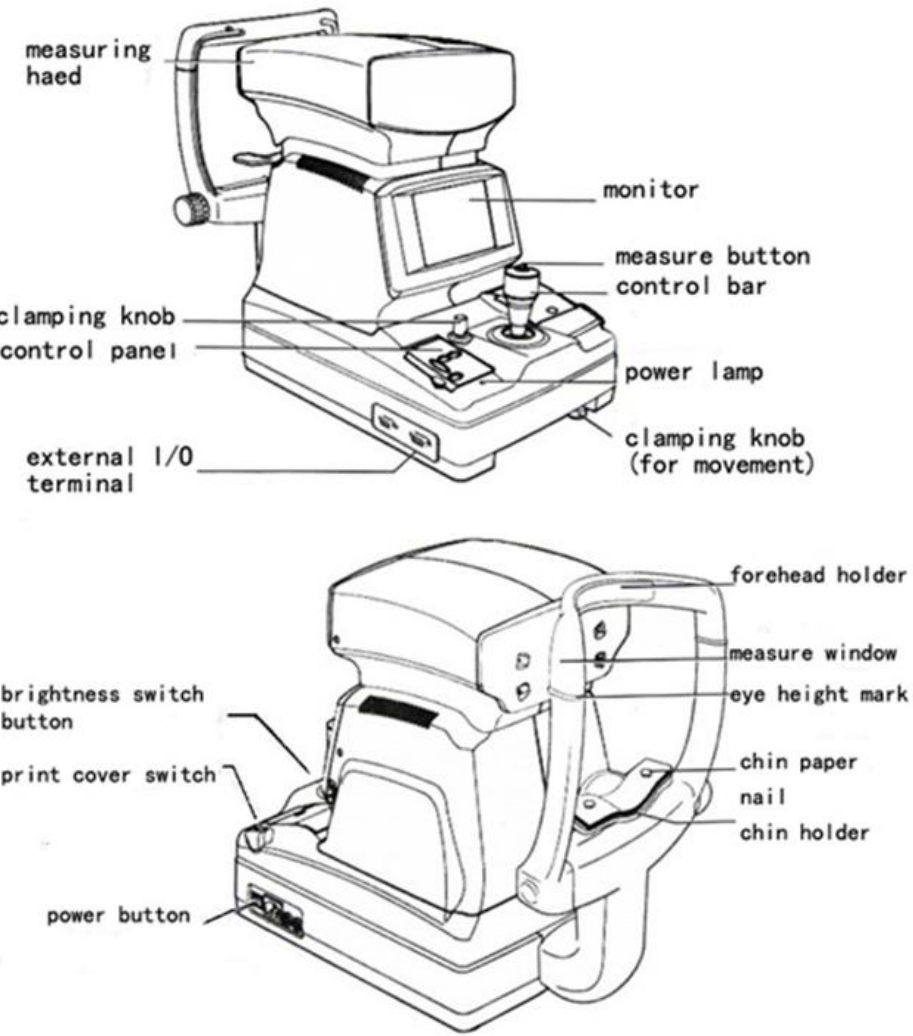
Feature:

FR-8900 Auto Refractometer

- The most advanced rotary prism technique of graph edition, make the graph measured quickly and clear.
- The precedent optical technique, consistent measurement and accurate figure.

FKR-8900 Auto Ref/Keratometer

- Combine measurement to diopter and corneal curvature
- The precedent optical technique, consistent measurement and accurate figure;
- The most advanced technique of a graph edition, make the graph measured quickly and clear.
- Humanized focusing design to make grasp focus more quickly.



FR-8900 Auto Refractometer

Technical Data		
Measuring Range	Spherical	-20~+20D (VD=12mm, 0.12 or 0.25D Steps)
	Cylinder	-8D~+8D (0.12D steps)
	Axis	0-180D (1D steps)
Pupil Distance	45-85mm (1mm steps)	
Vertex Distance	0,12,13.75mm	
Min. Pupil Distance	2.2 mm	
Chart	Auto Fog	
Display	5.7" TFT LCD	
Print	Thermal Printer	

FKR-8900 Auto Ref/Keratometer

Technical Data		
Measurement mode	K/R	Measure dioptre and corneal curvature
	REF	Measure dioptre
	KER	Measure corneal curvature
Diopter measurement	Vertical distance	0mm, 12.0mm, 13.75mm
	Sphere	25.00 ~ +22.00D (0.12/0.25D steps) (VD=12mm)
	Cylinder	8.00 D ~ + 8.00D (0.12/0.25D steps)
	Axis	1~ 180 (steps 1)
	Pupil distance	45 ~ 85mm (accuracy 0.5mm)
	Minimum pupil diameter	φ 2.0 mm
	Charter	Auto fogging method
Corneal Measurement	Corneal curvature radius	5 ~ 10 mm (0.01mm steps)
	Corneal dioptre	33.00 ~ 67.00 D (0.12/0.25D steps)
	Corneal Astigmatism	0.00 ~ - 15.00D (0.12/0.25D steps)
	Axis	1° ~ 180 ° (steps 1 °)
	Corneal diameter	2.0 ~ 12.00mm
Product Specification	Display	5.7" TFT color LCD screen
	Printer	Import thermal printer
	Energy save	Auto monitor energy save, no operation for 5 minutes
	Power supply	AC 100~ 240V, 50/60HZ

AR-7610 Auto Refractometer

ARK-7610 Auto Ref/Keratometer

Feature:

- New optical system, unique imaging impression
- Hartmann imaging analyzing and processing technology, accurate measurement result
- TFT touch screen, can move front and back freely Motorized chin rest
- Manual focusing, auto measuring
- The most cost-effective Hartmann refrac(kera)tometer in the world.

Adjustable LCD Touch Screen



High brightness and contrast 7" wide color TFT LCD screen, smooth touch mode, different angle can be adjusted

Motorized Chin Rest



By pressing the Up & Down buttons, the users can set and adjust the height of the patient's chin freely and quickly

Data Record

DATA RECORD									
R	SPH	CYL	AX	L	SPH	CYL	AX		
1	-0.50	-1.50	95	1	-0.50	-1.25	99		
2	-0.50	-1.50	95	2	-0.50	-1.25	99		
3	-0.50	-1.50	95	3	-0.50	-1.25	99		
4				4					
5				5					
6				6					
7				7					
8				8					
9				9					
10				10					
AVG	-0.50	-1.50	95	AVG	-0.50	-1.25	99		

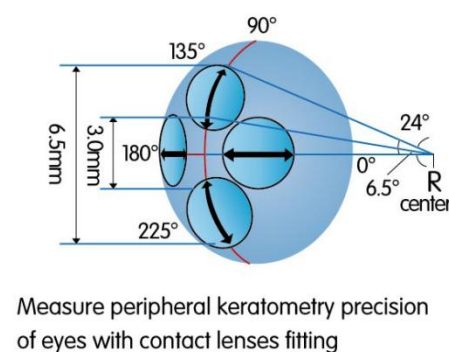
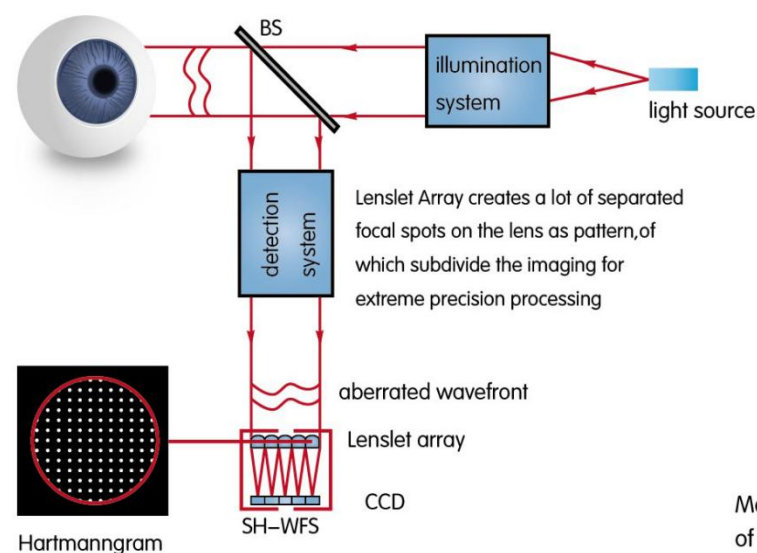
3 groups of data stored each measurement, maximum 10 groups of data can be stored

Operation interface function



Intuitive icons provide the user an easier operating circumstances, and make the measurement become more convenient and the data to be measured more accurate and fast

Hartmann imaging processing technology



Technical Data

Vertex Distance(VD)	0.0, 12.0, 13.75, 15.0
SPH	30.00D~+25.00D (VD=12mm, 0.01, 0.06, 0.12, 0.25 Unit)
CYL	0.00D~t 10.00D (0.06, 0.12, 0.25 Unit)
Axis(AX)	10 ~180 (10 Unit)
Cylinder Form	-, +, ±
Puiple Distance(PD)	10~86mm
Minimum Pupil Diameter	2.0mm
Measuring Time	< 0.5s
Pupil Diameter	2.00- -8.00mm
Measuring Light Energy	< 30uw (Insure measuring safety)
Radius of Curvature	5.0~ 10.0mm (0.01mm Unit)
Corneal Power	33.00D~67 00D(In case that the corneal equivalent refractive power is 1.3375)
Corneal Astigmatism	0.00D~- 15.00D(0.06D/0.12D/0.25D Unit)
Data Storing	Each 10 measured values of left eyes and right eyes
Axis	1°~180°
Chart	Auto fog
Monitor	7" TFT LCD touch screen (Angle of view adjustable)
Built-in Printer	57mm thermal printer

ARK-7800A / B Auto Ref / Keratometer

Feature:

- New optical system, unique imaging impression.
- Hartman imaging analyzing and processing technology, accurate measurement.
- TFT touch screen, can move front and back freely.
- Motorized chin rest,
- Auto paper-cutting printer,
- Auto tracking and focusing during measuring.
- High precision and accuracy, the most advanced image analysis and processing technology.
- Adjust the high resolution color touch widescreen,meet the users' different experiences and feelings.

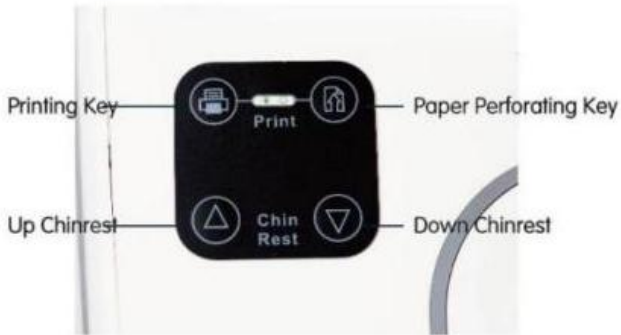


Adjustable LCD Touch Screen



High brightness and contrast SHARP 7" wide color TFT LCD screen, smooth touch mode,different angle can be adjusted

Operation Panel



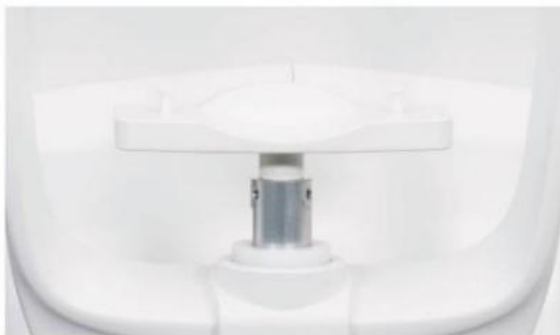
Press the printing key, the printer automatically print out the measured data(no measured data, the printer don't work). Install the printing paper top into the printer mouth, press the paper perforating key, the paper is perforated automatically. Press the up/down chinrest key, automatically adjust the height of chinrest

Auto Paper-Cutting Thermal Printer



Built-in thermal printer that can be easily loaded with a roll of paper, and cut the paper automatically at the end of printing

Motorized Chin Rest



By pressing the Up & Down buttons, the users can set and adjust the height of the patient's chin freely and quickly

Eye Socket Range



Start instrument, quickly move the device into the measuring area(black part)

Auto Tracking and Focusing



When move the device into the range of the patient's eye socket, it will track down a measuring focus of the eye automatically by the light sensors and 3D mechanism system inside(AF mode)

Auto Measuring



After auto focusing successfully, auto measuring(A mode) is performed. By these performances, an inexperienced user can also complete the measurement perfectly

Technical Data

Vertex Distance(VD)	0.0, 12.0, 13.75, 15.0
SPH	-30.00D~+25.00D (VD=12mm, 0.01, 0.06, 0.12, 0.25 Unit)
CYL	0.00D~±10.00D (0.06, 0.12, 0.25 Unit)
Axis(AX)	1° ~180° (1°Unit)
Cylinder Form	-, +, ±
Puiple Distance(PD)	10~86mm
Minimum Pupil Diameter	2.0mm
Measuring Time	< 0.5s
Pupil Diameter	2.00- 8.00mm
Measuring Light Energy	< 30uw (Insure measuring safety)
Radius of Curvature	5.0~10.0mm (0.01mm Unit)
Corneal Power	33.00D~67.00D(In case that the corneal equivalent refractive power is 1.3375)
Corneal Astigmatism	0.00D~- 15.00D (0.06D/0.12D/0.25D Unit)
Data Storing	Each 10 measured values of left eyes and right eyes
Axis	1° ~180°
Chart	Auto fog
Monitor	SHAPR7" TFT LCD touch screen (Angle of view adjustable)
Built- -in Printer	57mm thermal printer,auto paper-cutting
Electrical Power	AC 100~250V, 50/60Hz
N.W	22kg
G.W	26.5kg
Dimensions(packing)	(L)650mm X (W)400mm X (H)640mm

ARK-1800 Auto Ref/Keratometer

Feature:

- 7" TFT LCD monitor: Bigger, better monitor and icon-display menu for easier operation and setting.
- Refractive measurement with Hexagon prism: With high quality of hexagon prism and highly sensitive CCD, it provides unmatched accuracy and reliability.
- Auto focus function: Just move, it will automatically focus the eye and get the value
- Motorized chinrest: Operator can easily adjust the chinrest with switch located on the operator side and enables speedy reading.
- Tilting Screen: Tilting Screen function that allows wide variance of access whether the operator is sitting or standing.



Technical Data

Refractometer

++Vertex distance	0mm, 12mm, 13.75mm
Spherical	-20m-1-+20m-1(VD=12mm) 0.12/0.25m-1 Step
Cylinder form	-8m-1-+8m-1(VD=12mm) 0.12/0.25m-1 Step
Axis	0-180° 1° Step
Cylinder form	—、+、±
Pupil distance	45-88mm, 1mm Step
Min. pupil size	2.0mm

Keratometry

Radius of curvature	5.0-10mm (increment 0.01mm)
Corneal diopter	33.75m- -1- -67.5m-1 (when corneal equivalent refractive index is 1.337)
Corneal astigmatism	0.0- 8.0m-1 (increment selectable form 0.12, 0.25m-1)
Axis	1-180° (increment 1°)
Corneal diameter	2.0-14.0mm (increment 0.1mm)

Other

chart	Auto fog
Memory of data	10 measure value for each right and left eye
Display	7" LCD
Print	Thermal printer

FR-710 Auto Refractometer

FKR-710 Auto Ref/Keratometer

Feature:

- R/L fully automated measurement
- Easy-to-Use Color Touchscreen Control Panel
- Flexible and Space Saving Layout
- The adjustable control panel can be positioned in any direction
- Reliable Measurement
- Print and Auto-Cut Data Paper



Technical Data

Measurement mode (Only FKR-710)	K&R mode	Diopter and corneal curvature measurements
	REF mode	Diopter measurement
	KRT mode	Corneal curvature measurement
	CLBC mode	Contact lens curvature
Diopter measurement	Vertex distance (VD)	0mm, 12.0mm, 13.75mm, 15.00mm
	Spherical refractive power	-25.00D + 20.00D
	Cylindrical refractive power	0D ~ 8D
	Direction of astigmatic axis	0° ~ 180°
	PD measurement	45mm ~ 85mm
	Minimum pupil diameter	φ2.0mm
Corneal curvature radius	Corneal measurement	5.5mm ~ 10mm
	Corneal astigmatic axis	0° ~ 180°
	Corneal diameter	2.0mm ~ 12.0mm
Product specifications	Monitor	9" Touch LCD monitor
	Printer	Imported Thermal Printer
	Saving mode	1/5/10/20/40 minutes automatic screensaver
	Power supply	AC110V ~ 230V; 60/50HZ 75VA

RM-800 Auto Refractometer

RMK-800 Auto Ref/Keratometer

Feature:

- 3D Automatic for both eyes (automatic switching of human eyes), automatic for single eye, manual mode
- Hartmann microlens array, up to 108 effective measurement points
- 360-degree multi-directional reversal screen
- Self-check function: every time it is turned on, it will automatically check its own moving parts and optical parts



Technical Data	
Refractometer	
Vertex Distance	0.0mm,12.00mm,13.5mm,15.00mm
Sphere Range	-30D~+25.00D (VD=12, 0.12, 0.25 Increments)
Cylinder Range	0.00D ~12.00D (0.12, 0.25 Increments)
Axis	1°~ 180°(1° increments)
Cylinder form	-, +, ±
PD	10~85MM
Mini Pupil Size	2.0mm
Target	Auto fog
Keratometer	
Curvature Radius	5.0~13.00mm
Principal Meridian Axis	0°~ 180°(resolution: 1°)
Others	
Monitor	10-inch large HD display
Printer	Automatic paper cutting micro printer
Connection Port	RS-232 , video output, WIFI
Power supply	AC100~240V 50/60HZ