



Retinomax 3

The world's leading hand held Auto-Refractometer.

Retinomax K-plus 3

The unique combination instrument with additional Kerato readings.

Successful All Over The World

The mobile hand held instruments of the well known Retinomax series enable accurate results with greatest ease of use. Compact and portable they are the ideal solution for house calls, ward use, in the operating room and for testing children.

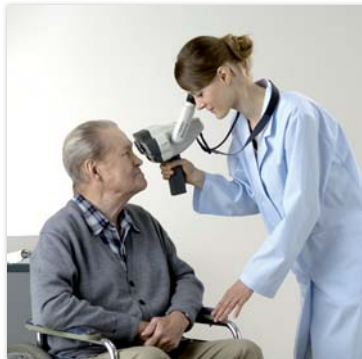


Absolute Freedom

Thanks to its extremely low weight of less than 1 kg Retinomax allows automated refraction wherever required. The complete Retinomax package always consists of the measuring head, the charging station, a mobile printer and accessories. Both the measuring head as well as the printer can be battery operated giving you total flexibility.

Quick Startup and Fast Printout

The main body takes only four seconds to start after power is turned on. Printout time is almost twice as fast as previous models.

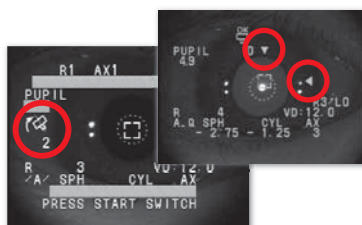


Fully Automated Measuring

You simply have to adjust the test mark to the corneal reflex and the measurement starts automatically - without pressing a trigger button. Retinomax stops measuring as soon as enough stable readings are available. This saves precious time and allows also untrained personnel to take measurements. Alternatively measuring time and the amount of the single readings can be set up manually.

2.3 mm Diameter Only

Even with a 2.3 mm pupil Retinomax can acquire reliable results. If the pupil size smaller than 3mm Retinomax automatically reduces the brightness of the fixation mark.



Flexible Refraction

Due to the unique level sensors Retinomax can be used sitting, standing or with supine patients. Retinomax detects its inclination with a parallel sensor, enhancing axis measurements in upright use. Level and position indicators are shown in the display, facilitating the ease of use. Also the mire ring makes focussing much easier.



Shortened Measuring Time

Measuring only takes 0.07 seconds in „Super Quick Mode“. This mode is extremely useful when measuring children or patients with nystagmus. Incorrect measurements caused by unwanted eye or hand movements will be avoided. Thereby Retinomax always gives you assured, authentic results.



◀ **Melody Function**

The melody function makes measurement of children easier, allowing examinations in a more relaxed atmosphere. This will enhance the quality of the readings.

◀ **Auto R/L Detection**

The instrument automatically detects whether the left or the right eye is being measured. The side can also be changed manually if required. (e.g. when measuring bed-ridden patients)



◀ **Wider Reading Range**

The measuring principle allows wide reading ranges up to -18 and +23 diopter spherical and +/- 12 diopter Cylinder. The kerato function of Retinomax K-plus 3 meters between 5 and 11 mm (central and peripheral) Retinomax also enables pupil diameter measurement from 2 to 10 mm (0.1 mm increments)

◀ **Small Dimensions**

With its compact design Retinomax helps avoiding phobias often caused by ordinary large devices.



◀ **Retro-Illumination**

Retinomax 3 and Retinomax K-plus 3 offer background illumination for better media examination. This very convenient feature also enables contact lens inspection.



◀ **Wireless Data Transfer**

Wireless communication via a wireless infrared connection is a very special high light. Retinomax is able to transfer its measurement data easily to auto phoropter RemoteVision or to your practice network. An additional common RS-232C interface can be used alternatively.

◀ **Long Memory**

Retinomax saves the measurement data for 100 eyes. Notably practical function: when re-starting Retinomax the last measurement can be printed anew. The amount of data to be printed out can be changed at will.

◀ **Dependable Technology**

Originally the first Retinomax series has been developed by **NIKON** and stands for the highest level of measuring technology. As an additional prove of dependability Retinomax prints out a reliability factor for its readings.



◀ **Carrying Case**

This sturdy and beautiful case (optional accessory) containing special safety foam takes care for the safety of your Retinomax. Dimensions: 650 x 350 x 220 mm



Specifications

Retinomax 3

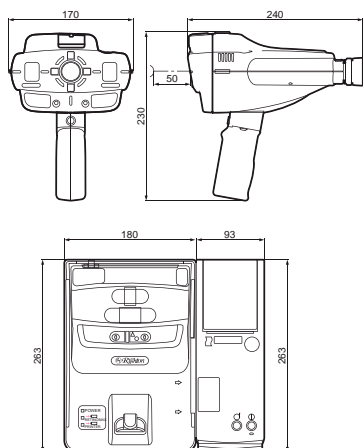
Retinomax K-plus 3

Hand Held Auto-Refractor Retinomax 3

Measurement range	Spherical (S + C) -18.00D to +23.00D (in 0.25D increment)
	Cylinder 0 to +12D or 0 to -12D (in 0.25D increment)
	Cylinder axis 1 to 180° (in 1° increment)
Minimum pupil size	ø2.3 mm (Auto Quick)
Vertex distance	0, 12 mm adjustable
Measurement time	0.14 sec. per indication (continuous)
Pupil size measurement time	+0.27 sec./1 time
Measurement mode	Auto/Continuous/Auto Quick/Quick
IOL wearing eye	Automatic support
Fixation target	Picture target
Battery life	Approx. 80 minutes (fully charged)
Eyepiece	4.05 x 3.02 mm LCD
Working distance	50 mm
Reaching distance	278 mm
External output	Infrared (Printer, Remote Vision)
RS-232C	(Main body—PC, Printer—PC, Main body—Monitor)
Dimensions	(main body only) 170(W) x 230(H) x 240(D) mm
Weight	Approx. 969 g (with battery) (Battery: Approx. 100 g)

Hand Held Auto-Refract-Keratometer Retinomax K-plus 3

Measurement range	Spherical (S + C) -18.00D to +23.00D (in 0.25D increment)
	Cylinder 0 to +12D or 0 to -12D (in 0.25D increment)
	Cylinder axis 1 to 180° (in 1° increment)
Radius of curvature	5.00 to 11.00 mm (in 0.01 mm increment)
Corneal astigmatism	in 0.25D increment
Cylinder axis	1 to 180° (in 1° increment)
Center	ø3.2 mm (R8 mm)
Peripheral	ø6.8 mm (R8 mm) (25° vertical/horizontal)
Minimum pupil size	ø2.3 mm (Auto Quick)
Vertex distance	0, 12 mm adjustable
Measurement time	Kerato and Refract 0.34 sec. per indication
Kerato alone	0.2 sec. per indication (continuous)
Refract alone	0.14 sec. per indication (continuous), 0.07 sec. (Quick)
Pupil size measurement time	+0.27 sec./1 time
Measurement mode	Auto/Continuous/Auto Quick/Quick
IOL wearing eye	Automatic support
Fixation target	Picture target
Battery life	Approx. 80 minutes (fully charged, at 25°C)
Eyepiece diopter adjustable range	±8D
Working distance	50 mm
Reaching distance	278 mm
External output	Infrared (Printer, Remote Vision)
RS-232C	(Main body—PC, Printer—PC, Main body—Monitor)
Dimensions (main body only)	170(W) x 230(H) x 240(D) mm
Weight	Approx. 999 g (with battery) (Battery alone: Approx. 100 g)



Charging Station

Dimensions	185 x 102 x 263mm (WxHxD)
Weight	Approx. 1.36 kg
Power consumption	100 VA

Printer

Interface	RS-232C
Dimensions	93 x 77 x 263 mm (W x H x D)
Weight	Approx. 595 g (without battery)