NIDEK

Auto Lensmeter

LM-1800PD/1800P

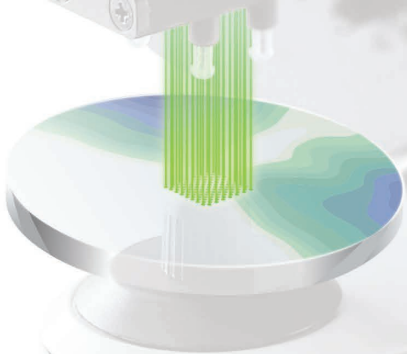
THE ART OF EYE CARE

Auto Lensmeter

LM-1800PD/1800P

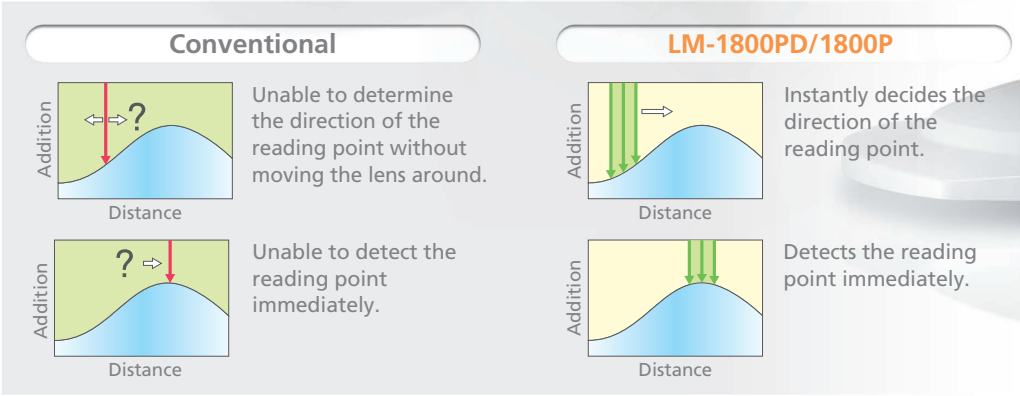
Beyond compare *–like nothing else–*

The culmination of NIDEK's accumulated experience and passion for the Auto Lensmeter

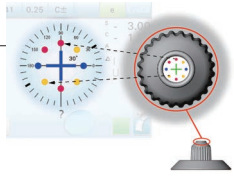


Hartmann sensor with 108 multiple measurement points

An advanced measurement principle, that incorporates simultaneous measurement of 108 data points within the nosepiece, provides greater accuracy and reliability with easier and faster measurements.



Distortion check



This function shows the lens distortion of glasses used by customers. It compares the vertex power of peripheral eight portions with the power of center portion in the nosepiece aperture. The degrees of deviation from ISO standards at the peripheral eight portions are displayed by colors.

Note: The results can only be used as a guide because the distribution of the entire lens distortion cannot be measured.

Automatic lens type detection

Placing the lens on the nosepiece activates the auto lens detection function to automatically determine the lens type and switch to the correct measuring mode.

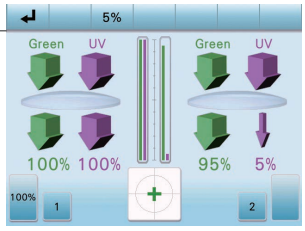
Green measurement light

Green light close to the ISO standard gives more precise measurement values without Abbe number compensation.

Green light transmittance measurement

The LM-1800PD/1800P can measure the transmittance of visible light by using the green light source. This function digitally calculates the transmittance through tinted lenses such as sunglasses, which has been estimated only on feel until now. It enables to recommend sunglasses with quantitative color strength based on the visible light transmittance.

Note: Please use the measurement result of visible light (green) transmittance just for reference. According to the in-house data, this measurement result and luminous transmittance showed a correlation.

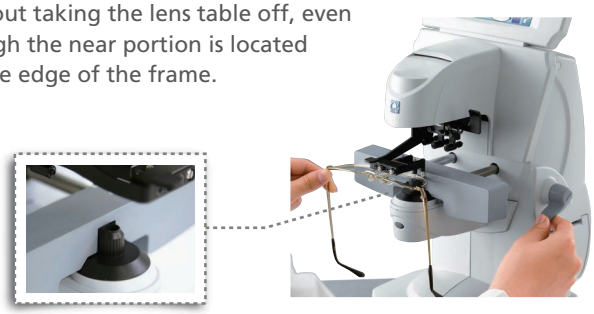


Transmittance comparison screen

Transmittance measurement result screen

Unique lens table expanding measurement range

A unique mechanism of the lens table allows the nosepiece to partially enter into the lens table. The mechanical change enables easy measurement of near portion of progressive lens without taking the lens table off, even though the near portion is located on the edge of the frame.



*PD measurement**

The LM-1800PD offers automatic Right/Left detection with the special PD slider, which also helps the operator easily hold glasses while measuring.

*It is also possible to measure approximate PD using scale mode function of the LM-1800PD/1800P.

Prism layout function

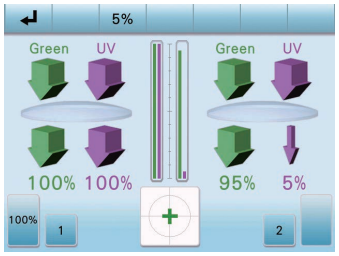
Entering the prism prescription value in advance allows easy marking of lenses at the prism prescription position, by just following the target shown on the screen.

Improved marking ink

Improved marking ink provides clear dots even on lenses with a water repellent coating/finish.

UV transmittance measurement

UV measurements with the visually enhanced display show the UV transmittance in the range of 0 to 100% by 1 or 5% increments. The comparison of the two lenses can be easily displayed.



High-speed line printer with auto cutter

The LM-1800PD/1800P features a high-speed printer with easy-to-read printouts. Measurement data is simply and logically presented for easy explanation.

< PROGRESSIVE >

RIGHT		LEFT
- 2.00	SPH	- 2.25
- 1.00	CYL	- 0.50
10°	AXS	170°
0 0.25	PSM	0 0.00
U 0.50		U 0.25
+ 1.75	ADD	+ 2.00
	PD	
30.5	61.5	31.0

NIDEK LM-1800PD

Sample printout (LM-1800PD)

5.7-inch color LCD touch screen

The adoption of the touch screen achieves ideal layout display, superior in operation and visibility.

User-friendly tiltable LCD

A tiltable (30°) full-graphic LCD monitor provides easier operation for both standing and sitting operators.

Built-in Eye Care card system

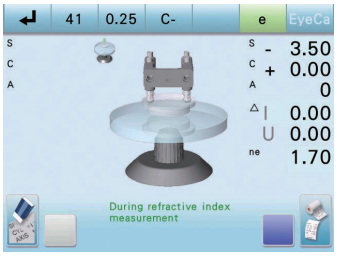
The LM-1800PD/1800P incorporates a card slot for Eye Care card system, which provides quick and easy wireless data transfer with auto refractometers and digital refractors.

Interface enhancement

The LM-1800 series comes with standard LAN connection, in addition to conventional RS-232C and USB connections. It is directly accessible to an auto refractometer, digital refractor, and computer.

Refractive index measurement

The refractive index is measurable with optional kit GO-MEISAN. No special software is required, and an operator can start it with graphical assistance in the measurement screen just by pressing buttons, and the index is automatically measured.



Note: This system aims to measure the refractive index easily. It is recommended to use the measured results as a guide.

LM-1800PD/1800P Specifications

Model	LM-1800PD	LM-1800P
Measurement range		
Sphere (Spectacle lenses)	-25.00 to +25.00 D	
Sphere (Contact lenses)	-25.00 to +25.00 D (BC=6.00 to 9.00) (0.01/0.06/0.12/0.25 D increments)	
Cylinder	0.00 to ±10.00 D (-, MIX, +) (0.01/0.06/0.12/0.25 D increments)	←
Axis	0 to 180° (1° increments)	
ADD	+0.40 to +10.00 D (first add, second add) (0.01/0.06/0.12/0.25 D increments)	
Prism	0.00 to 20.00Δ (0.01/0.06/0.12/0.25Δ increments)	
Prism mode	Δ, θ, Base in/out, Base up/down	←
PD measurement*	20.0 to 49.5 mm (monocular), Single vision PD, Progressive lens far vision PD	Not available
UV / Green transmittance	0 to 100% (1 or 5% increments) with central wavelength 365 nm (UV-A) and 535 nm (green)	←
Measuring time	0.06 second ±10% (minimum)	←
Measurable lens diameter		
Spectacle lenses	ø20 to 120 mm	←
Contact lenses	Larger than the inner diameter of the nosepiece (ø5 mm)	
Measurable transmittance	10% and more (20% and more for ±15.00 to ±25.00 D)	←
Compensation function for high index lenses	The Abbe number is changeable in the range of 20 to 60.	←
Marking system	Ink cartridge type, Ink pad type (optional)	←
Wavelength / measuring point	535 nm (green) / 108 within nosepiece	←
Display	5.7-inch color full graphic TFT-LCD, 640 x 480 dots with LED backlight	←
Printer	Thermal line printer with auto cutter (paper width: 58 mm)	←
Interface	RS-232C: 1 port USB: 2 ports LAN: 1 port	←
Power supply	100 to 240 V AC, 50/60 Hz	←
Power consumption	60 VA	←
Dimensions/mass	220 (W) x 252 (D) x 430 (H) mm / 5.0 kg 8.7 (W) x 9.9 (D) x 16.9 (H)" / 11.0 lbs.	←
Standard accessories	Power cord, Dust cover, Nosepiece for contact lenses, Measuring Progressive Power Lenses explanation guide, Printer paper	←
Optional accessories	Ink cartridge (red, blue), Ink pad type marking unit, Communication cable (RS-232C, USB), Foot switch, Barcode scanner, Magnetic card reader, Eye Care card, Simple refractive measurement system, Di-Check Package	←

*It is also possible to measure approximate PD using scale mode function of the LM-1800PD/1800P.

Product/model name: AUTO LENSMETER LM-1800P/1800PD
Brochure and listed features of the device are intended for non-US practitioners.
Specifications may vary depending on circumstances in each country.
Specifications and design are subject to change without notice.
GO-MEISAN is a registered trademark of TOKAI OPTICAL CO., LTD.

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