NIDEK

Auto Lensmeter

LM-1PD/1P/1



THE ART OF EYE CARE

Stress-free lens measurement, powered by intuitive operation

Based on NIDEK's legendary reputation for reliability and durability, the LM-1PD/1P/1 auto lensmeter pairs a sophisticated modern design with advanced, user-centric technology. Engineered for peak accuracy and enhanced operability, it transforms lens measurement into a seamless, stress-free experience for everyone. The LM-1 series delivers effortless operation without compromising precision.



Comparison table

	PD measurement	Printer	Transmittance measurement	Distortion check
LM-1PD	✓	✓	✓	✓
LM-1P		✓	✓	✓
LM-1				✓

Precise measurement with refined operability and accuracy

7.0-inch color LCD touch screen

Compared with previous models, the LM-1 series features a larger display and newly refined icon design for improved visibility. Intuitive icons displayed on a user-centric measurement screen significantly enhance overall usability.

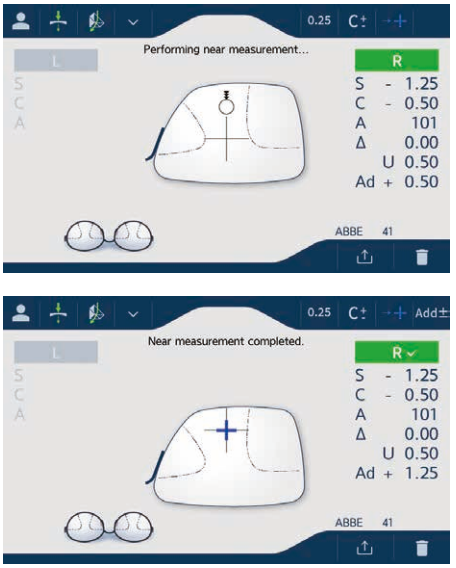


Automatic lens type detection

Even if the lens type is unknown, it can be automatically detected when the lens is placed on the nosepiece, ensuring the correct measuring mode is selected.

Hartmann sensor with 161 measurement points

The LM-1 series utilizes simultaneous measurement of 161 data points within the nosepiece, an increase from previous models.
An enhanced measurement algorithm makes it easier to accurately measure the near-vision area of low-power progressive lenses.



Green measurement light

531±12 nm green light similar to the ISO standard enables greater measurement precision without Abbe number compensation.

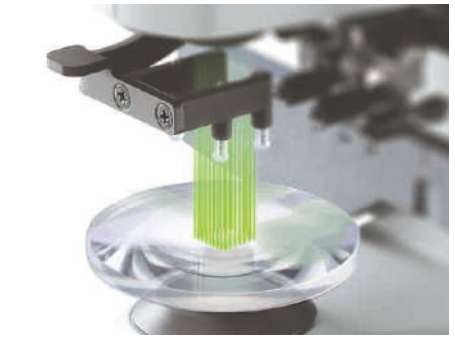


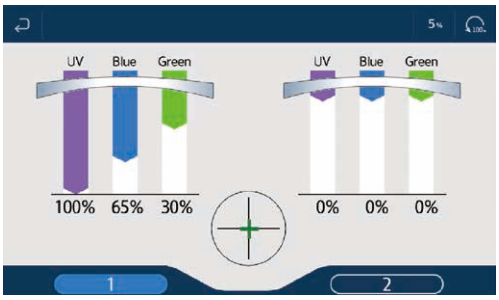
Image for reference only

Added value for lens measurement

Transmittance measurement

With the recent addition of blue light transmittance measurement, the LM-1 series can measure UV, blue light, and visible light* transmittance in 1% or 5% increments. UV transmittance is now measured at 400 nm, reflecting current market standards.
Additionally, two lenses can be compared, enabling easy visualization of differences between the current lens and a new lens.

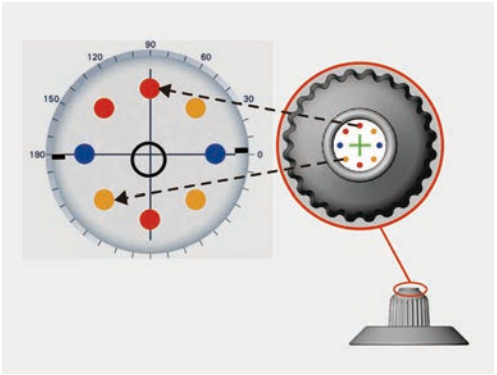
*Visible light (green) transmittance should be used as a reference guide only. In-house data indicate a correlation between visible light transmittance and luminous transmittance.



Distortion check

Distortions due to lens scratches and damaged coatings are easily visualized* by comparing the power of the eight peripheral areas with the central area within the nosepiece aperture. Differences between the center and each of these areas are displayed in 3 colors, facilitating an easy explanation of lens condition. This feature, previously available only on higher-end models, is now standard across the entire lineup.

*These results are only a guide because the distribution of the distortion over the entire lens cannot be measured.



Prism layout function

Pre-entering the prism prescription allows easy lens marking. Simply follow the on-screen target to mark the lens at the prescribed position.



PD measurement

The LM-1PD offers a special PD slider for automated right/left detection allowing easy handling of glasses during PD measurement. Additionally the LM-1 series can approximate the PD measurement with the scale mode function.



Seamless workflow throughout the process

Marking ink compatible with water-repellent coating/finish

Marking ink provides clear dots even on lenses with a water-repellent coating/finish.



High-speed line printer with auto cutter

The LM-1PD/1P features a high-speed printer with easy-to-read printouts. Measurement data is simply and logically presented for easy explanation.



RIGHT		LEFT
− 2. 00	SPH	− 2. 25
− 0. 50	CYL	− 0. 25
30°	AXS	180°
0. 00	PSM	0. 00
0. 00		D 0. 50
+ 0. 75	ADD	+ 0. 75
---------	PD	---------
32. 0	63. 5	31. 5
1. 5	INS	2. 0

NIDEK LM−1PD

More seamless workflow through data communication with external device

The LM-1 series features RS-232C, LAN, and USB-A connectivity as standard, with optional Eye Care card* expansion. Connecting to a computer or a NIDEK refraction system eliminates manual data entry, streamlining your workflow.

*Requires the optional EyeCa-RW2.



LM-1PD/1P/1 specifications

Model	LM-1PD	LM-1P	LM-1
Measurement range Sphere (spectacle lenses) Sphere (contact lenses) Cylinder Axis ADD Prism	 -25.00 to +25.00 D -20.00 to +20.00 D, BC = 6.00 to 9.00 (0.01/0.06/0.12/0.25 D increments) 0.00 to ±10.00 D (-, MIX, +) (0.01/0.06/0.12/0.25 D increments) 0 to 180°(1° increments) +0.40 to +10.00 D (first add, second add) (0.01/0.06/0.12/0.25 D increments) 0.00 to 20.00 Δ (0.01/0.06/0.12/0.25 Δ increments)	←	←
Prism mode	Δ, θ, Base in/out, Base up/down	←	←
PD measurement*	0.0 to 49.5 mm (monocular), Single vision PD, Progressive lens far vision PD	Not available	←
UV / blue / green transmittance measurement	0 to 100% (1 or 5% increments) with central wavelength 400 to 410 nm (UV-A), 449 to 465 nm (blue), and 519 to 543 nm (green)	←	Not available
Measurement time	0.08 s ±10% (minimum)	←	←
Measurable lens diameter Spectacle lenses Contact lenses	 ø20 to 120 mm Larger than the inner diameter of the nosepiece (ø5 mm)	←	←
Measurable transmittance	10% or more (15% or 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.	←	←
Lens marker	Ink cartridge type, Ink pad type (optional)	←	←
Reference wavelength / measuring point	Switchable between e-line (546.07 nm) and d-line (587.56 nm) / 161 within nosepiece	←	←
Display	7.0-inch color full graphic TFT-LCD 800 x 480 dots with LED backlight	←	←
Printer	Thermal line printer with auto cutter (paper width: 58 mm)	←	Not available
Interface	USB: 1 port RS-232C: 1 port LAN: 1 port	←	←
Power supply	100 to 240 V AC, 50/60 Hz	←	←
Power consumption	50 VA	←	←
Dimensions/mass	198 (W) x 249 (D) x 405 (H) mm / 4.40 kg 7.8 (W) × 9.8 (D) × 15.9 (H) in / 9.70 lb	198 (W) x 249 (D) x 405 (H) mm / 4.35 kg 7.8 (W) × 9.8 (D) × 15.9 (H) in / 9.59 lb	198 (W) x 249 (D) x 405 (H) mm / 4.05 kg 7.8 (W) × 9.8 (D) × 15.9 (H) in / 8.93 lb
Standard accessories	Power cord, dust cover, printer paper, nosepiece for contact lenses, instructions for progressive lens measurement	←	Power cord, dust cover, nosepiece for contact lenses, instructions for progressive lens measurement
Optional accessories	Communication cable (RS-232C), foot switch, EyeCa-RW2, Eye Care card, ink pad type marker replacement (red ink, blue ink), red/blue marker pen (with c-ring)	←	←

*In the LM-1 series, the approximate PD can be measured using the scale mode function.

Product/model name: AUTO LENSMETER LM-1PD/1P/1
Brochure and listed features of the device are intended for non-US practitioners.
The availability of products differs from country to country depending on the status of approval.
Specifications may vary depending on circumstances in each country.
Specifications and design are subject to change without notice.

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