Marco LM-Series
AUTOMATED LENSMETERS
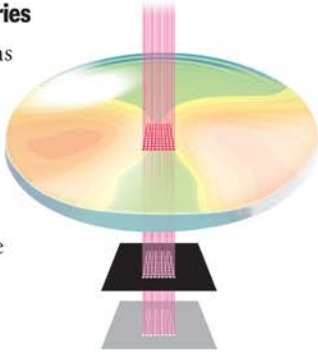
The **Marco Automated Lensmeter Series** represents the latest technology in lens measurement, providing simple and rapid operation. Faster detection and measurement acquisition offers unparalleled functionality and performance versatility, making it the most advanced automated lensmeter series available on the market today.

User Friendly

Hartmann-Shack sensor with 108 measurement points Advanced simultaneous measurement of 108 points within the nosepiece provides easier and faster measurements with greater accuracy and reliability.

Automatic Lens Type Detection Placing a lens on the nosepiece activates the auto lens detection mode, which determines if a lens is a single vision or progressive lens. The LM automatically adjusts to the appropriate measuring mode for the lens type.

Green Measurement Light is a special wavelength of light that is used when measuring high index lenses–closer to E-line. The ISO standard gives a more precise measurement value without having to change the Abbe Value.

Full Color & Graphic LCD display offers clear and easy recognition of various values, from single-vision lens to progressive lens. Superior LCD brightness and horizontal/vertical viewing angle.

5.7" Tilt LCD Touch Monitor (1800 only) with enhanced viewing angle allows operator to sit or stand..
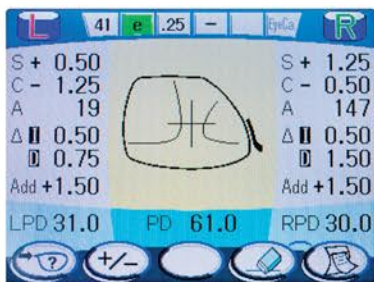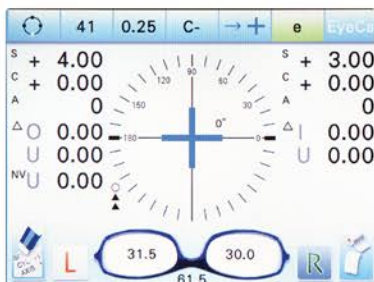
UV Transmittance Measurement
UV transmittance is reported in 1 or 5% increments over a range of 0-100%. The measured data can be saved and the UV transmittance of multiple lenses can be compared.
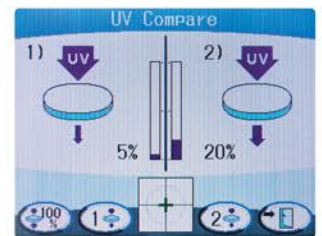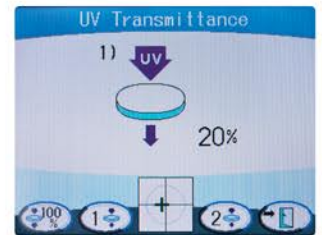
Wide Prism Measurement Range
Prism measurement range is expanded to 20 diopters in both horizontal and vertical directions, offering greater versatility.

Ergonomic Design

Built-in IC Card (Eye Care Card) Reader A Built-In IC Card Reader is located under the LCD monitor, providing quick and easy wireless data transfer to auto refractors and refraction systems. Ethernet interface available on 1800 only.

UNIQUE FEATURES

The Marking System is easy-to-use and can successfully mark even lenses that have a water repellent coating/finish.

High-Speed Printer with Automatic Cutter The high-speed printer is fast and has easy-to-read printouts. Replacing a new roll of paper is easy and takes only a few seconds. Available on all models except 600.

Easy PD measurement (LM-600PD and 1800PD only) Pupillary Distance (PD) can be measured easily – for both near and distance. Both lensmeters offer an automatic Right/ Left detection with a special PD slider, which assists the operator in holding glasses while measuring.

SAMPLE PRINTOUT

Printout sample in measurement of progressive power lenses

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< P R O G R E S S I V E >
   RIGHT                           LEFT
  +1.25          SPH            +0.50
  −0.50          CYL            −1.25
   142°          AXS              20°
  I 0.50         PSM           I 0.75
  D 1.75                        D 0.75
  +1.50          ADD            +1.50
   15%           UV              20%
  ───────────    PD        ───────────
   30.0          62.0            32.0

      N I D E K   L M − 6 0 0 P D
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FEATURES	LM-600	LM-600P	LM-600PD	LM-1800P	LM-1800PD
Hartmann-Shack Principle	✓	✓	✓	✓	✓
Automatic Lens Detection	✓	✓	✓	✓	✓
Full Color & Graphic LCD	✓	✓	✓	✓	✓
Marking System	✓	✓	✓	✓	✓
UV Transmittance	✓	✓	✓	✓	✓
Green Measurement Light	✓	✓	✓	✓	✓
Built-in IC Card Reader	✓	✓	✓	✓	✓
Wide Prism Measurement Range	✓	✓	✓	✓	✓
Printer w/Automatic Cutter		✓	✓	✓	✓
PD Measurement			✓		✓
Enlarged LCD Screen				✓	✓
Tiltable LCD Monitor				✓	✓
Ethernet Interface				✓	✓

LM-600 Series   LM-1800 Series

LM-Series SPECIFICATIONS

MODEL	LM-1800P, LM-1800PD	LM-600, 600P, 600PD
Measurable Range		
Sphere (Spectacle lenses)	-25 to +25 D	
Sphere (Contact lenses)	-25 to +25 D (BC=6.0 to 9.0), (0.01 / 0.06 / 0.12 / 0.25 D increments)	
Cylinder	0 to ±10 D (-, MIX, +), (0.01 / 0.06 / 0.12 / 0.25 D increments)	
Axis	0 to 180º (1º increments)	
ADD	0 to +10 D (Add, Ad2)	
Prism	0 to 20∆, (0.01 / 0.06 / 0.12 / 0.25∆ increments)	
Prism mode	∆, θ, Base In / Out, Base Up / Down	
PD measurement (LM-1800PD and LM-600PD)	20.0 to 49.5 mm (monocular), Single vision PD, Progressive lens far vision PD	
UV transmittance	0 to 100% (1 or 5% increments)	
Measurable lens diameter Spectacle lenses Contact lenses	20 to 120mm Larger than the inner diameter of the nosepiece (ø5 mm)	
Measurable transmittance	10% and over (20% and over for ±15 to ±20 D)	
Compensation function for high index lenses	The abbe number is changeable in the range of 20 to 60.	
Marking system	Ink cartridge type	
Wavelength / Points measured	535 nm (green) / 108 within nosepiece	
Printer	Thermal line printer with auto cutter (paper width: 58 mm)	
Power supply	AC 100 to 240 V, 50 / 60 Hz	
Display	5.7-inch color full graphic TFT-LCD, 640 x 480 dots with LED backlight	Full graphic LCD with 4.7-inch color screen
Interface	RS-232C, USB2.0 HOST, USB2.0 FUNC, 0/100BASE-T Ethernet - 1 port each	RS-232C, USB
Measuring time	0.06 second ±10% (minimum)	0.09 sec. (minimum)
Power Consumption	60 VA	40 VA
Dimensions / Weight	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.	7.64"(W) x 16.07"(H) x 8.27"(D) 7.94 – 8.82 lbs.
Standard Accessories	Printer paper, Power code, Dust cover, Nosepiece for contact lenses, Measuring Progressive Power Lenses explanation guide	Dust cover (1), fuse (2) power cord (1), contact lens holder (1) printer paper (4)
Optional accessories	IC card (Eye Care card), Interface cable, USB, cable, Foot switch, Ink cartridge (Red/Blue), Ink cartridge, Ink pad type marking unit, Barcode scanner, Magnetic card reader	RS-232C interface cable, USB cable (with driver), foot switch, marking cartridge (Blue & Red), IC card reader

All automated Marco technologies share data and integrate with leading EMR programs via Marco Connect software.