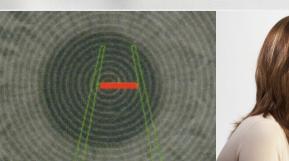
# MEDMONT E300 CORNEAL TOPOGRAPHER







The Medmont E300 Corneal Topographer offers the practitioner extreme accuracy for the mapping of a patients cornea. Utilising a PC, the patient's full corneal history can be stored and accessed quickly and efficiently. A huge range of display options is now available providing the user with information that they previously would only have dreamed about!

#### **APPLICATIONS**

The E300 Corneal Topographer has application in wide range of corneal analysis and treatment procedures, including PRK and LASIK procedures, Orthokeratology, Contact Lens fitting, Corneal Grafts, and Keratoconus.

### **CORNEAL COVERAGE**

Based on an unobtrusive compact cone design incorporating precision optics and using 32 rings with over 15000 measurement points, the E300 provides detailed topography data over a wide area of the human cornea. Coverage extends from a minimum ring diameter of 0.25mm to beyond 10mm, which is ideal for detailed assessment of corneal pathologies and detailed contact lens fitting.

### **IMAGE CAPTURE**

Images are captured automatically with a simple alignment system and progressive storage of the four best images. Difficult surfaces or patients become a simple task.

The advanced analysis software corrects defocused, off-centered images and corrects for errors due to misalignment, providing extreme accuracy. A simple image scoring system provides information to the user on the captured image quality.

### **ANALYSIS AND DISPLAY**

Easily configurable to specific preference of the user, the E300 is able to present a wide variety of different display options, with up to four images per screen. Examples are multiple images of the same type to identify trends, a difference display and a combination map which can present four different views (e.g. axial power, tangential power, elevation and video image) of one examination.

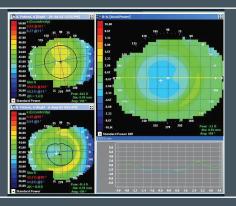
Zernike analysis software is also provided, including analysis of corneal height data and wave front error. Individual Zernike components can be displayed and analyzed.

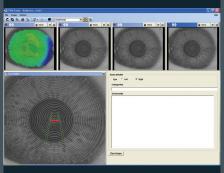
## CONTACT LENS FITTING SOFTWARE

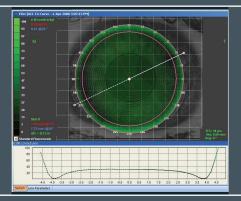
Automatic fitting of RGP lenses, including multiple peripheral curves, toric, aspheric and conic designs is quickly and easily performed with the E300. An expandable database of standard lens designs is included. Manual adjustment and repositioning of the lens can be performed, with the results presented on a simulated fluorescein display and a tear film clearance graph.

### PRACTICE MANAGEMENT INTEGRATION

Database integration with practice management systems and other Medmont products is now possible utilising Medmont Studio. This negates the need for multiple patient entry and improves markedly the efficiency of the practice. Several E300 units can operate on a local or geographically remote network, sharing a database.







Changes in corneal topography maps are easily displayed with the difference map view, this map showing the change induced by orthokeratology lens wear. Fully Automatic image capture makes patient testing simple and quick. Simply position the instrument, guided by the intuitive 3D focusing target, and the software does the rest. Each video frame is analysed for centering, focus and movement. The best four frames are automatically captured and displayed in the image windows above.

The contact lens fitting package is fully integrated with the rest of the software. It supports the fitting of multi-curve, toric RGP lenses. The contact lens database provides standard lens designs and can be easily updated independently of the software.





### SPECIFICATIONS - E300U

COVERAGE:

Diameter 0.25mm -11mm

FIELD OF VIEW:

11mm H x 11mm V

POWER RANGE:

10 –100 Diopters

NUMBER OF RINGS:

32

MEASUREMENT POINTS:

15,120

OPTICAL WORKING DISTANCE:

65mm

REPEATABILITY:

Test Object < 0.1 Diopters

FOOTPRINT:

Width: 320mm Depth: 400mm

Height: 430mm +/- 15mm stroke

WEIGHT:

5.5kg (unit only)

POWER REQUIREMENTS:

12V 500mA DC Supplied via PC

PC MIN REQUIREMENTS:

Compliant to IEC 60950 and powered via medical isolation transformer. Pentium IV, 1GHz, 512 MB RAM, 80GB HD, 2 x USB2 ports\*, Windows 2000 XP. CD or DVD. 17" monitor.

PRINTER:

Compliant to IEC 60950 Bubblejet / Laser Colour / Black & White

BACK UP:

CD ROM/DVD/

External Hard Drive etc.

CONTACT LENS DATABASE:

Comprehensive contact lens and ortho-K lens database standard.

\*required for dongle based licensing system Note: These specifications are subject to change without notification.© June 2006





### E300 FEATURES

- → Rapid and precise computer aided image capture
- → Superior performance through advanced image analysis
- → Precise resolution over large area of coverage
- → High capacity patient database with immediate access to stored results
- → Map displays:
  - Tangential curvature/power
  - Axial curvature/power
  - Height
  - Elevation from sphere
  - Refractive power
  - Ray error
  - Wavefront error
- → Contact lens fitting:
  - Multicuve
  - Aspherics
  - Conics
  - Keratoconic designs
  - Custom surfaces
- → Shape descriptors:
  - Astigmatism measurement
  - E, p, Q, e<sup>2</sup> values
- → Global indices:
  - SAI
  - SRI
  - I-S value
- → Regression analysis
- → User defined attributes
- → Microsoft Windows<sup>™</sup> based software:
  - inter/intra network compatible
  - linkage to external databases
- ightarrow Pupil, iris, HVID measurment
- → Axial Curvature

#### **MEDMONT INTERNATIONAL PTY LTD**

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