medmont
When Accuracy Matters

Medmont E300 USB Corneal Topographer

When Accuracy Matters

The E300 Advantage

- Largest Capture Area of Any Placido Ring Topographer Providing Full Limbus to Limbus Coverage
- Tear Film Surface Quality (TFSQ) Algorithm, Understand and Analyse Tear Film Breakup
- Exceptional Accuracy With a Standard Deviation of Error of 2 µm, Considered the Gold Standard for Fitting Specialty Contact Lenses
- Comprehensive Database of Contact Lens and Orthokeratology Lens Designs

The Medmont E300 USB Corneal Topographer offers the practitioner extreme accuracy for the mapping of a patients cornea. Utilising a PC, the patients 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 USB Corneal Topographer has applications in a wide range of corneal analysis and treatment procedures, including: Orthokeratology, Keratoconus, Contact Lens fitting, Corneal Grafts, PRK and LASIK procedures.

CORNEAL COVERAGE

Based on an unobtrusive compact cone design incorporating precision optics and using 32 rings with 9600 measurement points, the E300 USB provides detailed topography data over a wide area of the human cornea. Coverage extends from a minimum ring diameter of 0.25mm up to 14mm when using Composite Capture, which is ideal for detailed assessment of corneal pathologies and detailed contact lens fitting.

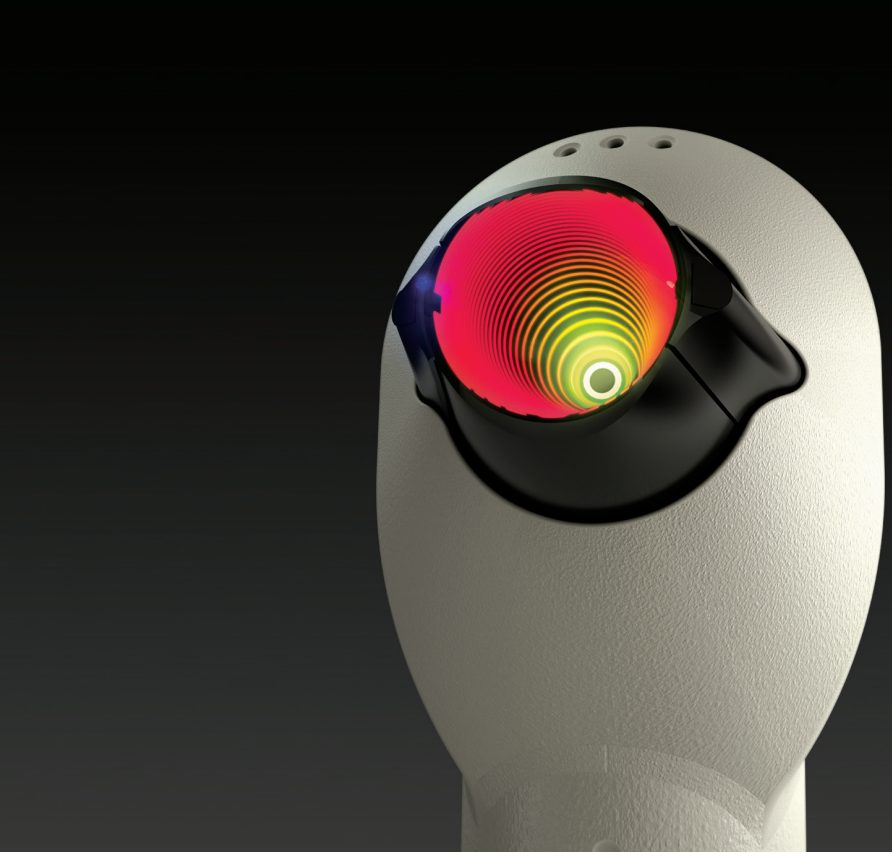
IMAGE CAPTURE

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.

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 USB. 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.



ANALYSIS AND DISPLAY

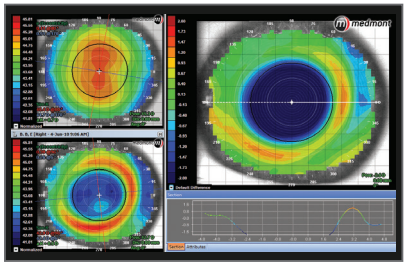
Easily configurable to specific preference of the user, the E300 USB is able to present a wide variety of different display options, with up to four images per screen. Examples of multiple images of the same type to identify trends, a difference display and a combination map which can present four different 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 analysed.

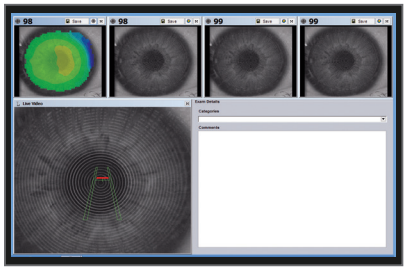
PRACTICE MANAGEMENT INTEGRATION

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 USB units can operate on a local or geographically remote network, sharing a database.

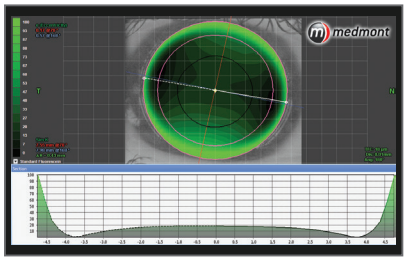
Changes in corneal topography maps are easily displayed with the difference map view, this map showing the change induced by orthokeratology lens wear.



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, Custom Designed Lenses and Sclerals. The contact lens database provides standard lens designs.



SPECS + FEATURES

COVERAGE
Standard Capture: 0.25 –11mm
TCC (Composite): Limbus to Limbus
Extrapolated Height Data Coverage: Limbus to 18mm

FIELD OF VIEW
H12mm x V10.5mm

POWER RANGE
10 –100 Diopters

NUMBER OF RINGS
32

NUMBER OF DATA POINTS
9600

OPTICAL WORKING DISTANCE
65mm

REPEATABILITY
Test Object < 0.1 Diopters

SHIPPING DIMENSIONS / WEIGHT
48cm x 55cm x 53cm
16 kg (Box and Unit)

FOOTPRINT
Width: 350mm
Depth: 350mm
Height: 430mm +/- 15mm Stroke

WEIGHT (INSTALLED ASSEMBLY)
8.6kg

POWER REQUIREMENTS
12V DC 500mA via USB Converter Box

PC MIN REQUIREMENTS
Compliant to IEC 60950 and Powered via Medical Transformer, Intel i5 Generation 3 Processor or Better, Genuine Intel Chipset Recommended, 40GB Hard Drive, 8GB RAM Recommended, 1-2 Free USB Ports Depending on Instrument, Windows 10 Pro 64 Bit, Minimum Screen Resolution: 1280 x 800

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

BACK UP
USB Flash Drive
External Hard Drive etc.

CONTACT LENS DATABASE
Comprehensive Contact Lens and Ortho-K Lens Database Standard.

Note: These specifications are subject to change without notification. © Medmont International PTY LTD

According Directive
93/42 EEC
ISO 13485
Certified Quality Systems

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

Expand Coverage with "Composite Eye" Function

Tear Film Surface Quality Analysis (Still Image & Video)

Map Displays
– Tangential Curvature/Power
– Axial Curvature/Power
– Height
– Elevation from Sphere
– Refractive Power
– Ray Error
– Wavefront Error
– Tear Film Surface Quality

Contact Lens Fitting
– Multicurve
– Aspherics
– Keratoconic Designs
– Scleral
– Custom Surfaces
– Custom Laboratory Lens Designs

Shape Descriptors
– Astigmatism Measurement
– E, p, Q, e2 values

Global Indices
– SAI
– SRI
– I-S value

Regression Analysis
– Orthokeratology Subtractive Maps

User defined attributes

Microsoft Windows™ Based Software
– Inter/Intra Network Compatible
– EMR/EHR Interface
– DICOM Interface
– USB Computer Interface

Pupil, Iris, HVID Measurement

YOUR LOCAL MEDMONT DISTRIBUTOR

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