

## B MODE

|   |                                   |
|---|-----------------------------------|
| Grey levels:  | 256                               |
| Adjustable gain:  | 20 to 110 dB                      |
| Time Gain Control (TGC):  | 0 to 30 dB                        |
| Dynamic range adjustment:   | 25 to 90 dB                       |
| Storage of still images and video sequences (up to 40 second duration) on hard disk |                                   |
| Image post-processing tools:  | calipers, areas, markers, comment |

### 15 MHz probe

|                         |               |
|-------------------------|---------------|
| Transducer frequency:   | 15 MHz        |
| Angle of exploration:   | 50°           |
| Depth of exploration:   | 60 mm (2.36") |
| Focus:                  | 24 mm (0.94") |
| Axial resolution:       | 115 µm        |
| Lateral resolution:     | 400 µm        |
| Frame Rate Acquisition: | up to 16 Hz   |

## BIOMETRY

|                          |              |
|--------------------------|--------------|
| Adjustable gain:         | 20 to 110 dB |
| Time Gain Control (TGC): | 0 to 30 dB   |

### 11 MHz Probe

|   |                               |
|---|-------------------------------|
| Transducer frequency:                       | 11 MHz                        |
| Tip diameter:                               | 7 mm (0.28")                  |
| Electronic resolution:                      | 0.03 mm (0.002")              |
| Depth:                                      | 60 mm (2.4") on 1536 points   |
| Contact and immersion techniques compatible |                               |
| Aiming beam:                                | LED or laser pointer ProBeam™ |

### Axial length measurements

Ultrasound propagation velocity adjustable per segment (anterior chamber, lens, vitreous) and IOL and vitreous material  
 Built-in pattern recognition: phakic, aphakic, PMMA, acrylic and silicone material for pseudo-phakic eye types  
 Automatic calculation of standard deviation and average total length (series of 10 measurements)  
 Acquisition modes: automatic, auto + save, manual  
 Automatic detection of scleral spike

### IOL calculation

SRK-T, SRK-II, HOLLADAY, BINKHORST-II, HOFFER-Q, HAIGIS  
 Post-op refractive calculation:  
 - Pre-op and Post-op refraction, Pre-op and Post-op keratometry  
 - 6 different methods for keratometric correction and implant calculation:  
 History derived, refraction derived, contact lens method, Rosa regression, Shammas regression, Double K/SRK-T (Dr. Aramberti's formula)  
 9 values bracketed for desired ametropia for each IOL (IOL increment steps: 0.25D or 0.50D). Simultaneous display of 4 different IOL calculations

## DATA MANAGEMENT

Built-in physician and patient database  
 Exportation of still images and video sequences  
 Customisable digital and printed report  
 DICOM compatible (Worklist, Storage, Print)\*  
 EMR compatible  
 Compatible with PC and USB video printers

# TECHNICAL SPECIFICATIONS

## PACHYMETRY\*

|                       |                             |
|-----------------------|-----------------------------|
| Transducer frequency: | 20 MHz                      |
| Tip diameter:         | 1.2 mm (0.05")              |
| Method:               | contact                     |
| Convergence:          | 0.5 mm (0.02") from the tip |
| Angle:                | 45°                         |

### Corneal thickness measurements

|                         |   |
|-------------------------|---|
| Measurement range:      | 200 to 999 microns  |
| Number of measurements: | 1 to 10   |
| Precision:              | ± 5 microns   |
| Velocity:               | adjustable  |
| Methods:                | central measurement or cartographic map (automatic, continuous, scanning) |
| Cartographic map:       | user - 9C8L - 9C4L - 5C8L - 5C4L - 9C - 5C - 8L - 4L                      |

### I.O.P. correlation tables

Tables correlating intraocular eye pressure and corneal thickness:  
 Ehlers + Doughty + Dresdner + unlimited user-defined tables

### Specifications

|                  |            |
|------------------|------------|
| Bias correction: | up to 120% |
|------------------|------------|

## GENERAL INFORMATION

Back-lit LCD colour touch screen monitor (resolution 1024 x 768 px)

### Electrical requirements

|               |  |
|---------------|--|
| Power supply: | 100-240 Vac ±10% single phase with earth |
| Frequency:    | 50/60 Hz                                 |
| Power:        | 60 W max                                 |

### Features

|                          |   |
|--------------------------|---|
| Overall dimensions:      | 26.8 cm (W) x 4.0 cm (D) x 24.6 cm (H)<br>10.6" x (W) x 1.6" (D) x 9.7" (H) |
| Touch screen dimensions: | 21 cm (W) x 16 cm (H) - 8.3" (W) x 6.3" (H)                                 |
| Weight:                  | 3.5 kg (7.7 lbs)  |
| Ports:                   | 4 USB, 1 ethernet, 1 HDMI   |

### Peripherals and accessories included in the basic configuration

Footswitch  
 Bluetooth mouse

### Peripherals and accessories in option\*

External PC printer Windows Operating System compatible (USB or Wifi)  
 Video printer with USB connection

### (\* Option

Specifications are subject to change without notice.  
 Non contractual pictures

## BIBLIOGRAPHY

1. Comparison of immersion ultrasound biometry and partial coherence interferometry for intraocular lens calculation according to Haigis - W. Haigis et al. - Graefes Arch Clin Exp Ophthalmol. 2000 Sep
2. New laser fixation device for ultrasound biometry - M. Charles - Ophthalmol. Clin. Exp. 2007



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