

A customizable ultrasound platform



# UBM High Frequency A/B Scan

Versatility  
Innovation  
Accuracy

A customizable ultrasound platform

# AAR Aviso



# AVISO

A customizable ultrasound platform

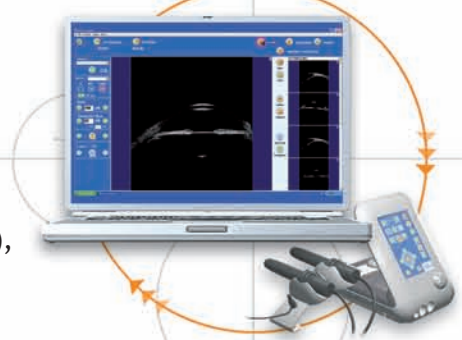
## AVISO, A UNIQUE ULTRASOUND SYSTEM

- **USER-FRIENDLY IMAGE ACQUISITION PARAMETERS**
  - PC software driven by the AVISO interface
  - Touch screen
  - Main parameters just one click away
  
- **HIGH-PERFORMANCE PROCESSING TOOLS**
  - Database: users and patients
  - Cineloop: automatic storage of exam sequences
  - Varigain: adjustable gain on frozen images
  - Simplified image management
  - Post-processing image tools: measurements (distances and angles), markers, comments
  
- **ADJUSTABLE ERGONOMIC CONDITIONS**
  - Portable-easy to carry from place to place
  - Probe holder: functional, 180° orientation

DURING EXAMINATION



DURING POST PROCESSING



## AVISO, OPHTHALMIC ULTRASOUND MADE EASY

- **EASY USER INTERFACE**
  - PC and touch screen icons are intuitive
  - Main menu is always accessible
  - Three dedicated zones: Parameters/Images/Navigation
  - Patient report generation (up to 8 images)



- **A UNIQUE DATA-PROCESSING SYSTEM**
  - Echo Data Reader: transfer data from others Quantel Medica Ultrasound system to a PC\*
  - Connected to medical servers (DICOM and EMR standards)\*



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"THE CHOICE IS YOURS." ADAPT AVISO TO YOUR NEEDS: 7 PROBES

**LINEAR MOVEMENT, A TECHNOLOGICAL BREAKTHROUGH**

An innovative design for anterior chamber examination and measurements

- Lin50: a linear 50 MHz UBM probe
- Lin25: a linear 25 MHz UBM probe

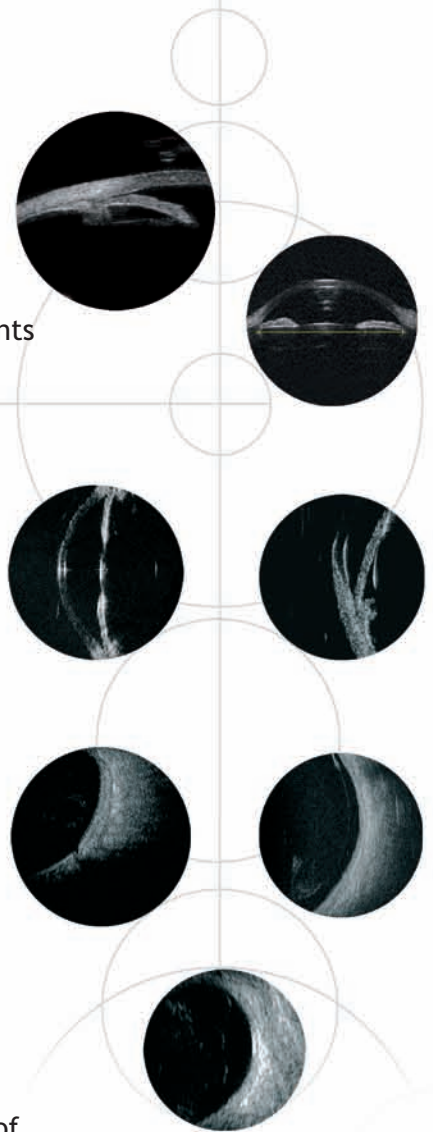
**HIGH FREQUENCY 20 MHZ PROBES AND 10 MHZ PROBE**

- 20 MHz probe for anterior segment structures  
View the anterior chamber in one scan
- 20 MHz probe for posterior pole  
High-resolution images of the posterior pole
- 10 MHz probe  
General eye and orbit examination

**HIGH-PRECISION BIOMETRY**

2 biometry probes

- Standard probe
- ProBeam™ Probe\*: speed, ease of axial length acquisition, precision of optimized measurements



\* Option



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## TECHNICAL SPECIFICATIONS:

*Aviso is a complete ophthalmic ultrasound imaging system in A and B scan modes*

### B SCAN MODE

Gain adjustable from 20 to 110 dB  
 Gain (before TGC) adjustable from 0 to -30 dB  
 Dynamic range adjustable from 25 to 90 dB

Unlimited image storage  
 Post-processing measuring tools: distances, areas, angles, markers, comments

### B SCAN MODE PROBES \*

**10 MHz probe**  
 Transducer frequency: 10 MHz  
 Angle of exploration: 50°  
 Depth of exploration: 20 to 60 mm (0.79" to 2.37")  
 Focus: 24 to 26 mm (0.94" to 1.02")  
 Axial resolution: 200 µm  
 Lateral resolution: 600 µm

**20 MHz probe for anterior segment**  
 Transducer frequency: 20 MHz  
 Angle of exploration: 50°  
 Focus: 8 to 10 mm (0.31" to 0.39")  
 Axial resolution: 80 µm  
 Lateral resolution: 160 µm

**20 MHz probe for posterior pole**  
 Transducer frequency: 20 MHz  
 Angle of exploration: 30°, 50°  
 Focus: 24 to 26 mm (0.94" to 1.02")  
 Axial resolution: 100 µm  
 Lateral resolution: 250 µm

### B SCAN MODE LINEAR UBM PROBES \*

**Linear 50 MHz UBM probe**  
 Transducer frequency: 50 MHz  
 Linear transducer movement: exploration width 16 mm (0.63")  
 Focus: 9 to 11 mm (0.35" to 0.43")  
 Axial resolution: 35 µm  
 Lateral resolution: 60 µm  
 Dimensions: 17 cm x 2.8 cm (6.7" x 1.1")  
 Weight: 190 g (0.42 lb)

**Linear 25 MHz UBM probe**  
 Transducer frequency: 25 MHz  
 Linear transducer movement: exploration width 16 mm (0.63")  
 Focus: 9 to 11 mm (0.35" to 0.43")  
 Axial resolution: 70 µm  
 Lateral resolution: 120 µm  
 Dimensions: 17 cm x 2.7 cm (6.7" x 1.1")  
 Weight: 190 g (0.42 lb)

### BIOMETRY \*

**Probe**  
 Frequency: 11 MHz  
 Diameter of tip: 6 mm (0.23")  
 Method: contact, immersion  
 Aiming beam: LED or laser pointer\*  
 Electronic resolution: 0.04 mm (0.002)  
 Depth: 45 mm (1.77")  
 Points on X: 1536  
 Level on Y: 256

**Axial length measurements**  
 Types of measurements: anterior chamber, lens, vitreous, total length, automatically calculates standard and average deviations, results analysis  
 Number of measurements: 10  
 Precision: ± 0.04 mm (0.002)  
 Velocity: adjustable for each segment  
 Frozen image: auto, auto + save, manual (foot pedal)  
 Automatic detection of scleral spike

### Formulas included

6 formulas for implant 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. ARAMBERRI's formula)

7 different implant powers for desired ametropia value  
 Screen display of 4 different implant calculations  
 Implant values available in increments of: 0.25D or 0.50D

### Specifications

Gain: 110 dB  
 TGC: 0 to -30 dB

### GENERAL FEATURES

**Connection**  
 Connect using the USB-2 port of the PC  
 Special software drives communication between the image acquisition module and the PC  
 Images displayed on the PC monitor  
 EDR\* (Echo Data Reader): data transfer from Quantel Medical Ultrasound systems to a the computer of AVISO\*  
 DICOM\* and/or EMR\*: connection to medical servers

**Documentation**  
 Images are saved in patient databases  
 Reports can be printed on any printer connected to a PC equipped with Windows XP  
 For enhanced quality, use a laser printer and photo quality paper

**Electrical requirements**  
 Power supply: 100 to 240 Vac +/- 10% single phase + grounding  
 Frequency: 50 / 60 Hz  
 Power: 50 VA max

**Features**  
 Overall dimensions: 19 cm (L) x 17 cm (W) x 19 cm (H); 7.5" (L) x 6.7" (W) x 7.5" (H)  
 Touch screen dimensions: 8.6 cm (W) x 11.5 cm (H); 3.4" (W) x 4.5" (H)  
 Weight: 1.5 kg (3.3 lb.)

### \* Option

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