Forus Health
Technology delivering care

Smarter Measurements, Better Outcomes

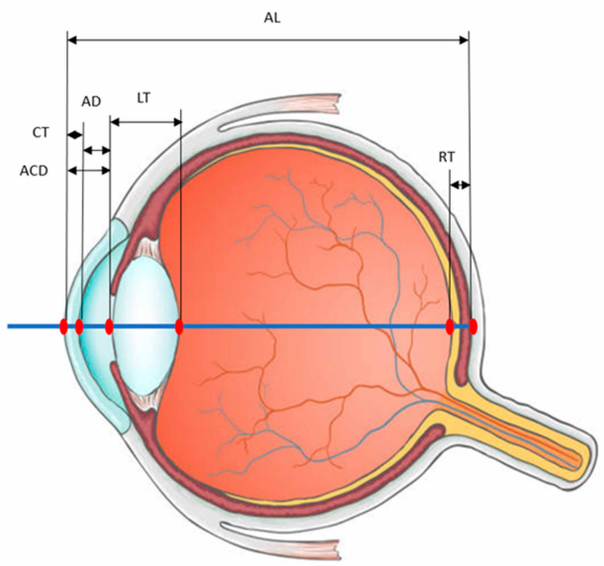
Seamless IOL Calculations for Precision and Efficiency

Empowering Eye Care Professionals through Optimized Workflow and Mobility

3nethra bio

3nethra bio

The 3nethra bio is an advanced optical biometer that utilizes low-coherence interferometry to deliver precise measurements of key ocular parameters. It ensures accurate alignment of the eye axis and measures **axial length, central corneal thickness, corneal curvature, anterior chamber depth, lens thickness, white-to-white distance, and pupil diameter.** Additionally, it calculates intraocular lens (IOL) power for precise implantation, optimizing refractive outcomes. Its intuitive design streamlines data acquisition, enhancing diagnostic accuracy, treatment planning, and overall clinical efficiency.



Advantages

✓ **Rapid Measurement**
Monocular measurements take a few seconds, with binocular measurements averaging less than 20 seconds.

✓ **High Accuracy & Repeatability**
Achieved through 32 concentric light points for precise corneal measurement.

✓ **Comprehensive Diagnostic Capabilities**
Predicts refractive attributes, tracks axial growth, and enhances myopia prevention, cataracts, corneal reshaping, and visual quality.

✓ **Kappa Angle Measurement Support**
Evaluates the angular difference between the visual and optical axes, which is crucial for optimizing outcomes in cataract surgery.

✓ **User-Friendly Operation**
Features animated voice guidance for easy and intuitive use.

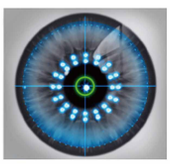
✓ **Dual Mode Functionality**
Offers Standard Mode for aphakic eyes and Pro Mode for phakic and pseudophakic eyes.

Key Features

✓ High-Precision Axial Measurements with OLCR Technology

The integration of Optical Low Coherence Reflectometry (OLCR) technology enables high-precision axial measurements. By analyzing the time delay and intensity of reflected light, OLCR achieves sub-micron accuracy while minimizing refractive index-related errors.

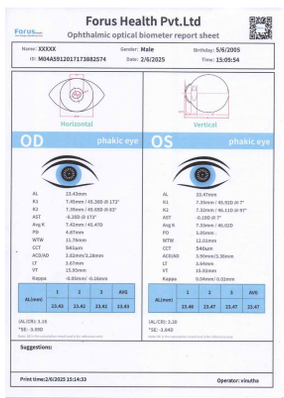
✓ High-Precision Corneal Analysis Using 32 Light Points

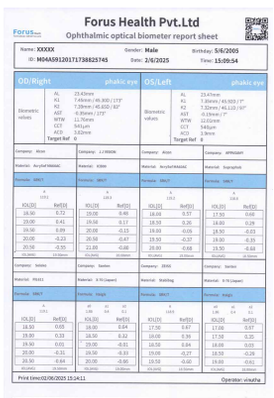


The system projects 32 concentric light points onto the cornea, aligning reflections for high-precision, repeatable calculations.

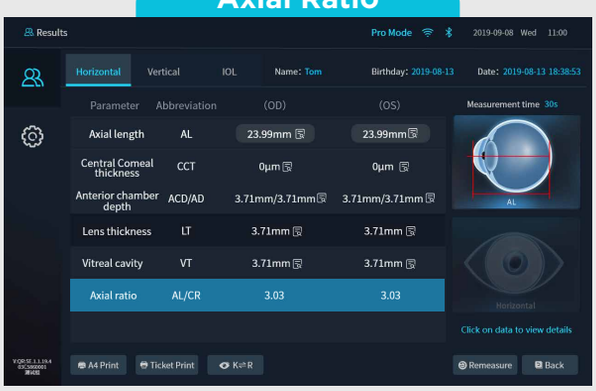
✓ Advanced Eye Diagnostic System

- Predicts refractive attributes and axial growth
- It supports myopia control.
- It offers insights into:
  - Cataracts
  - Myopia Progression
  - Visual quality with Kappa angle measurement



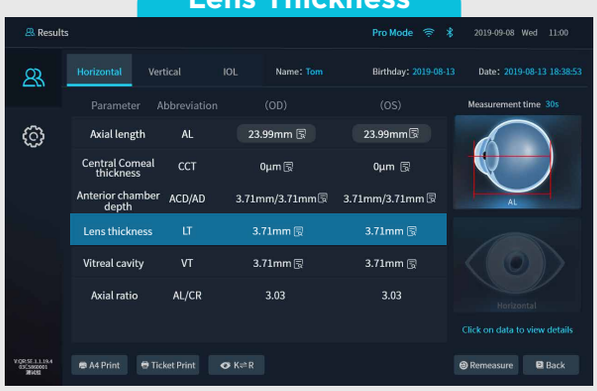


Axial Ratio



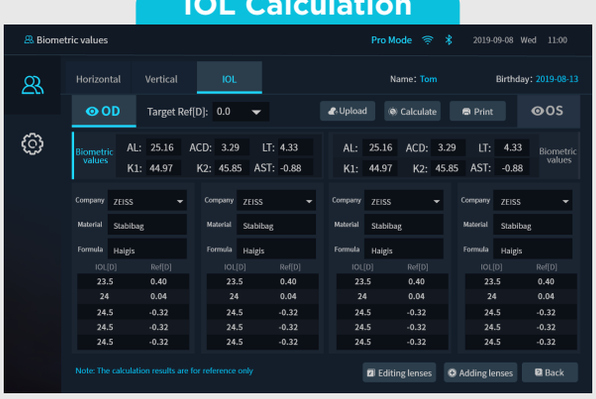
Measuring the Axial Ratio for Precise Eye Diagnosis

Lens Thickness



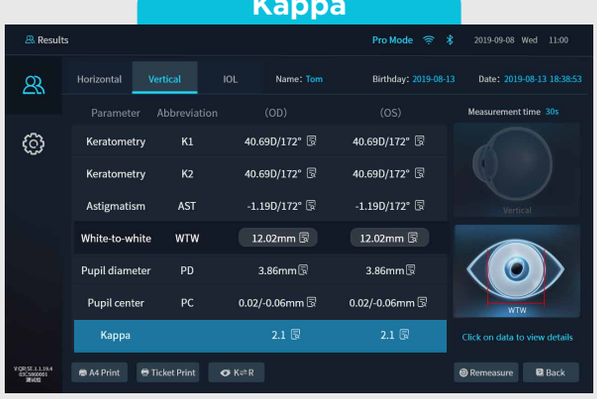
Lens Thickness Measurement for Enhanced Eye Health Analysis

IOL Calculation



IOL Calculation for Precise Cataract Surgery Planning

Kappa



Kappa Angle Measurement for Accurate Ocular Alignment and Cataract Surgery Planning

Technical Specifications

Content	Measuring Range	Standard Deviation	Display Resolution
Axial Length (AL)	12~38mm	±25µm	0.01mm
Corneal Curvature (K1 & K2)	4.7mm~11.5mm	±10µm	0.01mm
Axial Angle (AST)	0°~180°	±9°	1°
Central Corneal Thickness (CCT)	300~800 µm	±2µm	1µm
Anterior Chamber Depth (ACD)	1.5~6.5 mm	±20µm	0.01mm
Lens Thickness (LT)	0.5~7.0 mm	±50µm	0.01mm
White to White Distance (WTW)	6mm~17mm	±0.2mm	0.01mm
Pupil Diameter (PD)	1.8mm~13.6mm	±0.3mm	0.01mm

Parameters	Values
Technology	OLCR (Optical Low Coherence Reflectometry)
IOL Power Calculation Formula	SRK/T, SRK II, Hoffer-Q, Hoffer-Colenbrander, Holladay 1, Haigis, Haigis-L, Binkhorst, Shammas.
Printer	External Thermal Printer and Wireless Connection for A4 printer
Dimension and Weight	410(L) x 240(B) x 410(H) mm | 15Kg
Display	10 inch Touch Screen Display
Power Supply	100-240V AC, 50/60 Hz | Output - 24V DC 2.7 A
Interfaces	USB, HDMI, WiFi, Bluetooth

Forus Health
Technology delivering care

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