

# SW-9000 OPTICAL BIOMETER

The SW 9000 is an optical biometer that can accurately measure the length of the optical axis and perform intraocular (IOL) calculations.

Its operation is based on the combination of an ultra-bright laser, 820nm wavelength, with Optical Low-Coherence Reflectometry (OLCR) technology, allowing eight measurements to be taken with one scan. It provides high accuracy and fast measurement without contact. It is convenient, does not require anesthesia in the eye and can not cause any infection or injury to the iris or pupil.

The calculation method of the intraocular lens (IOL) provides accuracy in micrometers in the following parameters:

- Eye's Axial length
- Central cornea thickness
- Anterior chamber depth
- Lens thickness
- Keratometry
- White to white distance
- Pupil Diameter
- Technical data fiche zie brochure



## TECHNICAL DATA

### MEASUREMENT RANGE

Axial length	12 - 34 mm
Central corneal thickness	300 - 800 µm
Corneal radii	4.8 - 11.1 mm
Axis angle	0° - 180°
Anterior chamber depth	1.5 - 6.0 mm
Lens thickness	0.5 - 7.0 mm
White-to-white	6.5 - 16.6 mm
Pupil diameter	1.9 - 13.5 mm

### RESOLUTION

Axial length	0.01 mm
Central corneal thickness	1 µm
Corneal radii	0.01 mm
Axis angle	1°
Anterior chamber depth	0.01 mm
Lens thickness	0.01 mm
White-to-white	0.01 mm
Pupil diameter	0.01 mm

### SD OF REPEATABILITY

Axial length	±25 µm
Central corneal thickness	±2 µm
Corneal radii	±10 µm
Axis angle	±9°
Anterior chamber depth	±20 µm
Lens thickness	±50 µm
White-to-white	±0.3 mm
Pupil diameter	±0.3 mm

### IOL CALCULATION FORMULAS

BinkHorst-II, Holladay, Hoffer-Q, Haigis, SRK-T, SRK-II

### CALCULATION FOR EYES FOLLOWING REFRACTIVE SURGERY

Shammas-PL, Masket, Modified Masket