

# SCANMATE FLEX

Portable USB A-Scan, B-Scan, and UBM in  
a powerful, seamless platform



# Three Probes, One Powerful Platform

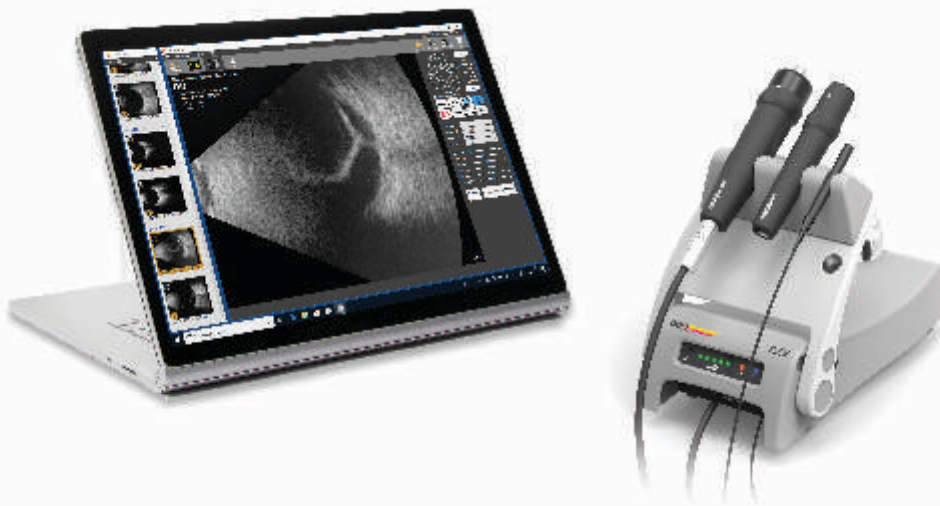
The Scanmate Flex, a portable, ophthalmic ultrasound platform, is the perfect product to enhance your practice's diagnostic capabilities. The Flex provides any desired combination of A-Scan, B-Scan, and UBM. Its hallmark is flexibility.



**A-SCAN** – The Flex A-scan uses DGH's proven alignment algorithm to obtain repeatable and accurate axial length measurements. The IOL calculator is easy to use and includes most modern and post refractive formulas.

**B-SCAN** – The redesigned B-Scan Probe, new with the Flex, provides clear imaging of the posterior segment of the eye, even when optical clarity is compromised.

**UBM** – The Flex UBM probe is indispensable when obtaining high resolution images of the anterior segment of the eye, including images of structures concealed by the iris or corneal opacities.



## Strategic Deployment – In more ways than one:



The Flex can be placed on a desk or counter, mounted on the wall, or moved around in a cart.



The Scanmate software is offered as an unrestricted license, meaning it can be installed on multiple workstations to operate independently or as a networked system. Patient records are stored in a database that is easily searchable and can be backed-up using an in-program backup tool.



The Flex is powered by an internal rechargeable battery, making the unit totally portable. The Flex carrying case is designed to hold both the Flex and a tablet PC so the entire system can be used without being removed from the case – perfect for transporting between multiple sites.

# Total Imaging Solution



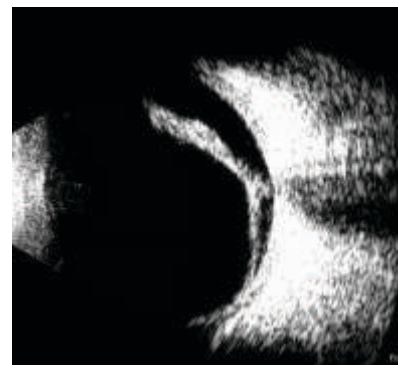
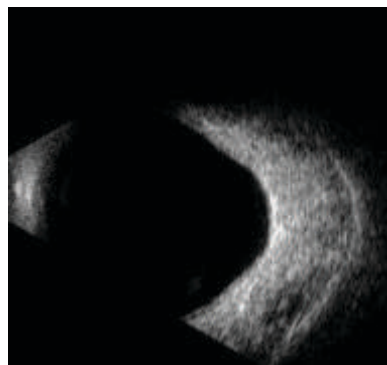
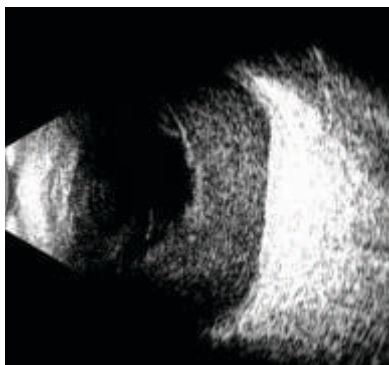
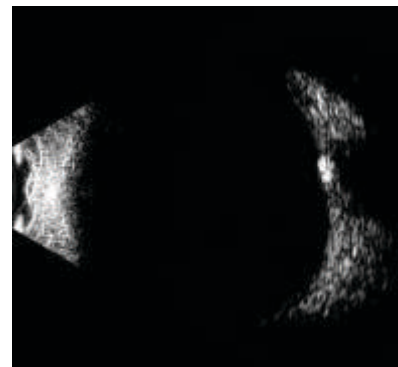
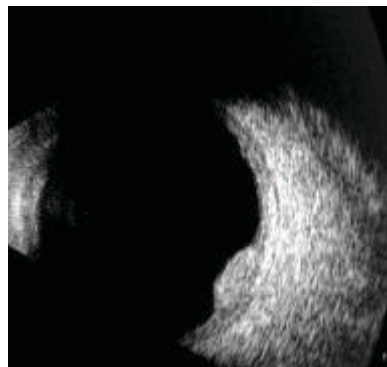
The Scanmate Flex **B-Scan** probe enables clinicians to capture clear and precise images and videos of the posterior segment of the eye. Ultrasonic B-Scans are effective, even when opacities (such as dense cataract, blood, or anatomical structures) are present which obscure optical imaging technologies.

The B-Scan probe is available in both 12.5 MHz and 20 MHz frequencies. Among the on-screen tools are calipers to measure structures, an area measurement tool and an annotation tool that gives you a way to indicate pathologies on the image.

## B-Scan Diagnostic Applications

The Flex B-Scan delivers clear images of the posterior portion, even when optical clarity is compromised. B-Scan imaging can aid the evaluation of:

- Retinal Detachments
- Vitreous Detachments
- Vitreous Humor Pathologies
- Staphylomas
- Posterior Segment Pathologies
- Choroidal Pathologies
- Optic Nerve Pathologies
- Scleral Thickening



# Total Imaging Solution



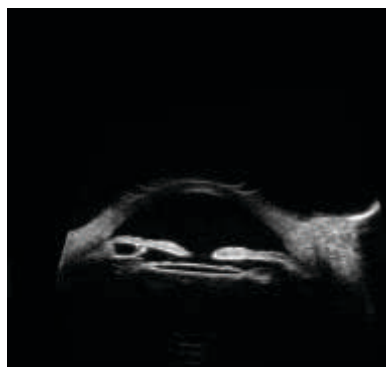
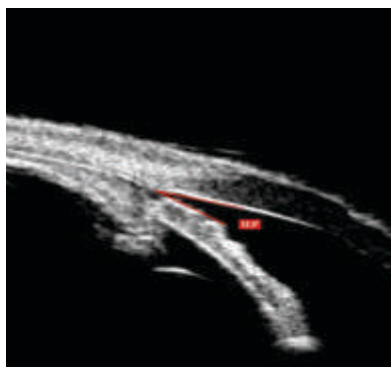
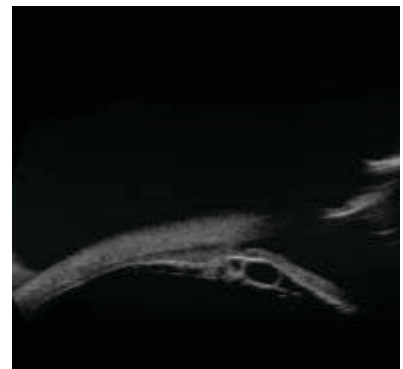
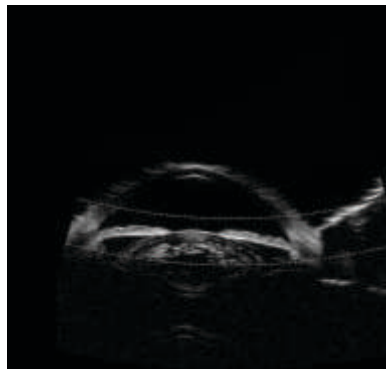
The **UBM** is indispensable when imaging the anterior segment. High-resolution UBM images provide the ability to observe structures concealed by the iris or corneal opacities.

Typical applications of the high-resolution images obtained with either a 35 MHz or 50 MHz transducer include sulcus-to-sulcus measurement, angle-closure, and anterior chamber pathologies. The Scanmate software provides tools for angle, area, and length measurement along with an annotation tool for indicating pathologies. A water-filled single use sterile ClearScan® Probe cover is the only component that touches the eye.

## UBM Diagnostic Applications

The Flex UBM delivers clear images of the anterior segment. This technology is presently being utilized in procedures such as:

- ACA Measurements
- Post-Lasik Corneal Evaluation
- IOL Position Monitoring
- Pre-Operative ICL Evaluation
- Diagnosis of Iris and Ciliary Cysts
- Glaucoma Post Surgery Evaluations



# Total Biometry Solution



The innovative Flex A-Scan offers clinicians an unmatched level of usability and accuracy. Unique measurement guidance features assist in achieving optimal measurement values. These features allow the user to focus on application technique while the device's software performs real-time waveform analysis and provides immediate feedback to the user.

The DGH Software supports multiple IOL formulas, including post-refractive formulas. A-Scan measurements can be taken via direct corneal contact or via water immersion method (Prager Shell® included).

## A-Scan Measurement Features



A unique grading algorithm automatically ranks the probe's alignment

along the axis of measurement. Alignment ranking is immediate, with each qualified measurement assigned a 1-star, 2-star or 3-star rank (3-star representing best alignment). Aided by the audible feedback, the user can adjust the probe's contact angle during a procedure, correcting misalignments and thereby optimizing measurement.



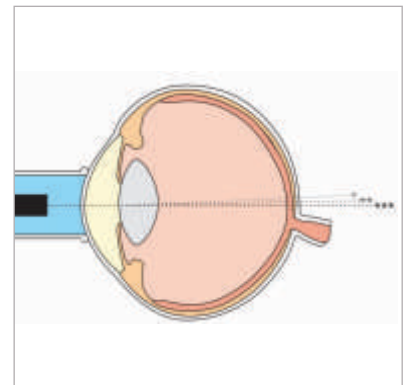
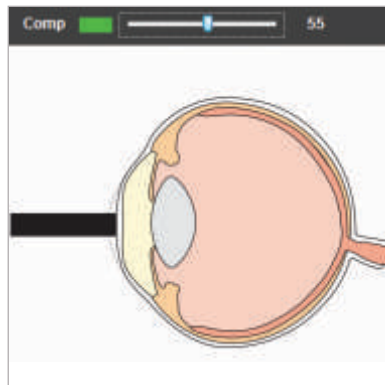
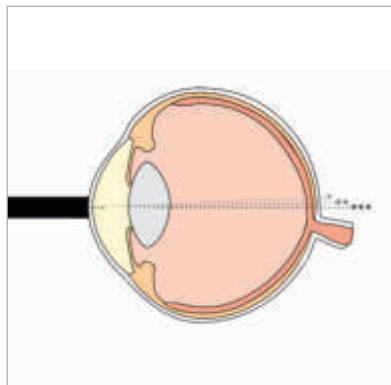
Unique compression lockout feature for use during contact measurements. When

enabled, compression lockout will stop the system from measuring waveforms which show indications of corneal compression. Audible tones are provided to guide the user in adjusting contact pressure and aid in alleviating flattening of the cornea. The compression sensitivity level is adjustable to aid in obtaining contact measurements with minimum compression.



The Flex A-Scan can operate in either contact or immersion mode. Immersion

mode eliminates corneal compression by allowing measurement in a water bath. The probe releases ultrasonic pulses into water (rather than directly to the eye). The pulses propagate through the water and into the tissue. This method of measurement eliminates potential deformation of the cornea's geometry caused by direct contact from a probe.

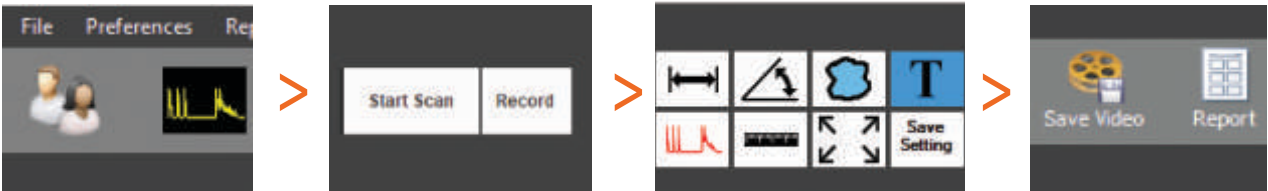


# Total Software Solution

The Scanmate Flex combines the most advanced ultrasound technology available with the processing power, data storage and connectivity advantages of a personal computer. Patient data can be stored on a local computer, or in a centralized network where it can be accessed by multiple users. Patient records are fully searchable and can be exported in a format that is compatible with EMR/EHR systems. The Scanmate software is designed to work on a Windows® computer. The Scanmate Flex plugs into the USB 2.0 port of a Windows® computer that you may already have in your office or clinic\*.

\* See Specifications page for minimum computer requirements.

The Software was designed to accomplish an examination in 4 simple steps



**1. Patient Data:**  
Populate the necessary fields and you're ready to acquire images.

**2. Acquire Images:**  
Click on desired modality icon, and start acquiring images and data.

**3. Image Quantification and Processing:**  
The software offers tools to measure distance, area, and angles, and an annotation tool for notating images. Images can be enhanced by adjusting intensity, contrast, and gains (near, mid, and far).

**4. Reporting:**  
The Scanmate Software offers a variety of report templates that summarize critical information and are print and .PDF ready.

# Scanmate Flex Configurations



FLEX A/B/UBM



FLEX A/B



FLEX B/UBM



FLEX UBM



FLEX B

# Specifications

## B-Scan Specifications

<b>B-Scan Probe Type</b>	Internal, pivoting single-element transducer. 256 lines per scan. 60° scan angle.	
<b>B-Scan Mode of Imaging</b>	Contact	
<b>Transducer Frequency Options</b>	12.5 MHz	20 MHz
Lateral Accuracy	± 550 µm	
Axial Accuracy (Theoretical)	28.9 µm	
Focal Point (Nominal)	20.00 mm	21.00 mm
Depth of Field	14.00 mm – 37.00 mm	15.00 mm – 35.00 mm

## UBM Specifications

<b>UBM Probe Type</b>	External (removable), pivoting single-element transducer. 256 lines per scan. 30° scan angle.	
<b>UBM Mode of Imaging</b>	Water Path (using ClearScan® probe cover)	
<b>Transducer Frequency Options</b>	35 MHz	50 MHz
Lateral Accuracy	± 250 µm	
Lateral Resolution (Nominal)	80 µm	50 µm
Axial Accuracy (Theoretical)	9.6 µm	
Axial Resolution (Nominal)	65 µm	50 µm
Focal Point (Nominal)	13.00 mm	
Depth of Field (Nominal)	11.50 mm – 14.00 mm	

## A-Scan Specifications

<b>A-Scan Probe Type</b>	Internal, fixed single-element transducer.
<b>A-Scan Mode of Measurement</b>	Contact or Immersion (using Prager Shell® immersion shell)
<b>Transducer Frequency</b>	10 MHz
Axial Length Measurement Range	15.00 mm – 40.00 mm
ACD Measurement Range	2.00 mm – 6.00 mm
Lens Thickness Measurement Range	2.00 mm – 7.50 mm
Resolution	0.01 mm
Repeatability	± 0.03 mm STDEV (Immersion)
IOL Formulas	SRK II, Binkhorst, SRK/T, Holladay 1, Hoffer Q, Haigis
IOL Formulas (Post Refractive)	Double K (SRK/T), History Derived, Clinically Derived (Shammas), Refraction Derived, Contact Lens Over-Refraction

## Base Unit Specifications

Dimensions	209.55 mm (L) x 133.50 mm (W) x 101.60 mm (H)
Weight	8.00 lbs
Battery Type	3250 mAh Li-ion rechargeable battery (internal)

## Software Application Requirements

Hardware Requirements	Intel i5 or higher, 4GB RAM or higher, 128 GB SSD/HDD or higher 2 x 2.0 USB, 1024 x 768 display resolution or higher
Operating System Requirements	Windows 8 or higher (32 or 64 bit), MS server 2008 R2 (64 bit), MS Server 2012 / 2012 R2 (64 bit), MS Server 2016 (64 bit)



DGH Technology, Inc. is globally recognized as a leader in developing and manufacturing ultrasound diagnostic equipment, and we have been serving eye care professionals since 1982. We are a multigenerational family company and we have operated with the same core values and integrity since our inception.

DGH has made building trust a priority by offering reliable products and strong customer support. We value our customers and use their feedback to develop innovative products that fit their needs. Eye care professionals across the world receive the same personalized and full-service experience.

DGH has maintained our worldwide reputation by continuing to introduce innovative products that anticipate the future needs of eye care professionals, while maintaining the quality and reliability of our already existing products. Since 1982, we have shipped over 40,000 products worldwide.

Find out more about us on [dghtechnology.com](http://dghtechnology.com)

DGH Technology, Inc.  
110 Summit Drive, Suite B  
Exton, PA 19341  
USA

Phone: (610) 594-9100  
Fax: (610) 594-0390  
Toll Free: (800) 722-3883  
Email: [info@dghtechnology.com](mailto:info@dghtechnology.com)

