



**Ω LumenEye®**

A New Era In Proctology

See more. Treat more.

SurgEase Innovations 2025

See more. Treat more.

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# ABOUT

SurgEase was founded by Fareed Iqbal, a UK trained colorectal surgeon with a passion for disruptive technology and improving patient outcomes. His commitment to helping surgeons make better decisions for patients suffering from diseases of the bowel such as cancer, was realised through the invention of the LumenEye® X1, which is now sold in over 16 countries. It is FDA cleared and it has been shown to dramatically increase the precision of colorectal diagnosis, whilst reducing healthcare costs in numerous colorectal pathways. The introduction of LumenEye® X1 empowers colorectal surgeons to perform comprehensive rectal evaluations without the cost, complexity, or logistical constraints of traditional flexible endoscopy.



Fareed Iqbal  
Founder & CEO



SurgEase  
Innovations  
Head Office  
United Kingdom

## OUR VISION

To enhance surgical diagnostic accuracy and seamlessly connect clinicians around the globe.

## OUR MISSION

To develop ground-breaking technology that facilitates affordable surgical excellence anywhere in the world and dramatically improves patient outcomes.

# ESTABLISHMENT

SurgEase was founded in 2016 in the Pennine Hills of Lancashire, in the historic mill town of Nelson; birthplace of the Founder and a location steeped in industrial heritage. With deep roots in manufacturing and innovation, Nelson was once a powerhouse in the cotton wool trade and is now home to major engineering firms such as BAE Systems and Rolls-Royce. This environment laid the foundation for SurgEase's early success and culture of British engineering excellence.

In 2024, the company relocated its headquarters to Maidenhead, Berkshire, a strategic move that reflects its growth and ambition. From this new base, SurgEase continues to build on its legacy, combining its Northern industrial roots with the commercial and operational advantages of the South East.

Our ISO-13485 accredited facility supports in-house hardware and software engineering teams who drive our innovation pipeline, ensuring our products remain best-in-class examples of Great British medical technology. The UK design ethos remains at the core of what we do, and is reflected in the precision, quality, and clinical relevance of every device we create.

Since its inception, SurgEase has built a global reputation for delivering disruptive surgical technologies, from the world's first digital rectoscope, LumenEye®X1, to the development of the telepresence CHIP® platform, and the recent launch of Mentor, a surgical video repository and performance assessment system. Our mission is clear, and our commitment to innovation, collaboration, and transformation remains unwavering.



# PRODUCT OVERVIEW

LumenEye® X1 is a clinically proven, next-generation digital rectoscope designed to deliver high-quality imaging and efficient care directly to the patient, across every tier of the healthcare system. In use since 2016, it has amassed a strong body of clinical evidence supporting its effectiveness in primary, specialist and ambulatory care settings.

Compact, portable, and easy to deploy, LumenEye® empowers clinicians to perform real-time rectal examinations safely, accurately and cost-effectively, wherever the clinical need arises. The device captures high-definition video and still images with an expansive 88° field of view, enabling confident clinical assessment and documentation.

Fully integrated with the CHiP® platform, LumenEye® ensures secure image storage, remote review, and seamless collaboration across multidisciplinary teams, supporting modern, data-driven models of care.

Trusted. Connected.  
Designed for Modern Healthcare.





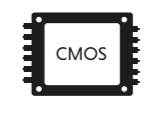


## In Theatre. In Control.

LumenEye® X1 enhances intraoperative visualisation, supporting decision-making in perineal, rectal, and post-resection surveillance workflows.

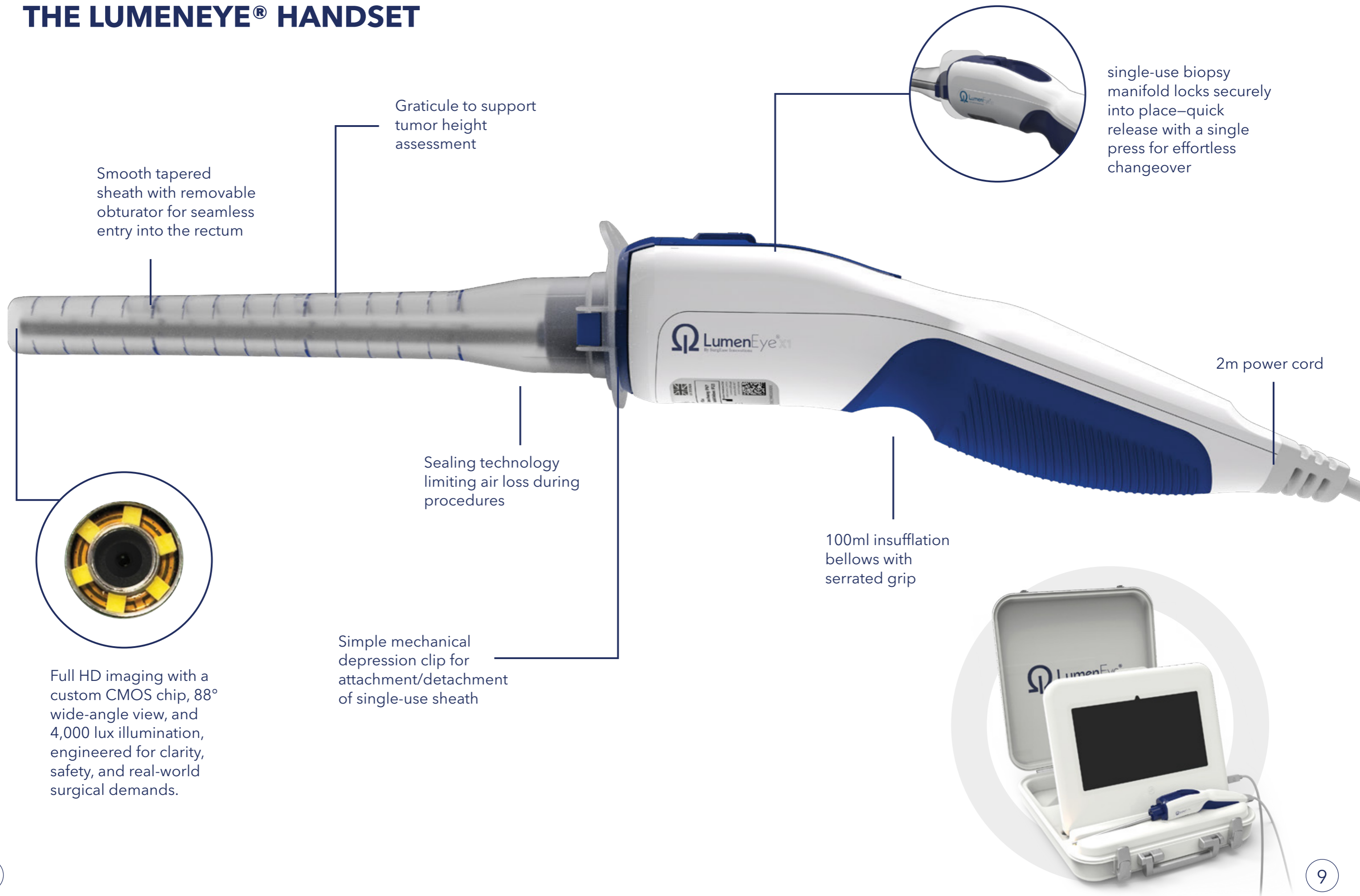


## Built on Evidence. Trusted by Surgeons. Essential to Practice.

LumenEye® has been redefining digital rectoscopy since 2016. Backed by many peer-reviewed publications and years of real-world use across multiple tiers of care, it has become an indispensable tool in the surgical management of rectal disease. Whether used for preoperative assessment, intraoperative visualization, or post-surgical surveillance, LumenEye® delivers the clarity, portability, and precision colorectal surgeons rely on to make timely, confident decisions. Its rapid adoption speaks not just to innovation but to clinical relevance where it matters most.

-   
 Full spectral colour
-   
 High-definition
-   
 Latest chip technology
-   
 UK Design
-   
 Realistic images

# THE LUMENEYE® HANDSET



Smooth tapered sheath with removable obturator for seamless entry into the rectum

Graticule to support tumor height assessment

single-use biopsy manifold locks securely into place—quick release with a single press for effortless changeover

2m power cord

Sealing technology limiting air loss during procedures

100ml insufflation bellows with serrated grip

Simple mechanical depression clip for attachment/detachment of single-use sheath

Full HD imaging with a custom CMOS chip, 88° wide-angle view, and 4,000 lux illumination, engineered for clarity, safety, and real-world surgical demands.

# THE LUMENEYE® X1 CONSUMABLES

The intelligent design of the LumenEye® X1 allows for a comfortable and efficient scoping and biopsy experience for both the user and patient; all of which can be carried out at the point-of-care.



Single-use manifold reduces reprocessing time and cost.



Biopsy, snare and cauterise under direct view.



Easy to assemble and operate.

## EVIDENCE-BASE

### Bedside LumenEye® Assessment for Early Anastomotic Leak Detection

March 1, 2025  
Annals of Coloproctology

### Advantages of a point-of-care Digital rectoscope for colorectal surgical practice: a video-supported case series

January 1, 2025  
Surg Laaprosoc Endosc Percutan tech

### Comparative Efficacy of MRI vs Rigid Rectosigmoidoscopy in Rectal Tumor Assessment

April 1, 2024  
Revista Mexicana de Cirugía Colorrectal

### LumenEye® X1: Sustainable Alternative to Flexible Sigmoidoscopy in Primary Care

January 1, 2024  
British Journal of Surgery

### LumenEye® for Immune Checkpoint Inhibitor-Induced Colitis

June 1, 2023  
Gut

### Transanal ICG Injection for Lymphatic Mapping in Colorectal Cancer

November 29, 2022  
Colorectal Disease

### Lucid Study: Digital Rectoscope for Lower GI Triage in Primary Care

June 16, 2022  
BJGP Open

### Observational Analysis of LumenEye®

December 1, 2021  
Diseases of the Colon & Rectum



**Pr. Quentin Denost**  
Professor of Colorectal Surgery -  
Bordeaux France

*"LumenEye® X1, combined with CHIP®, is a valuable tool for assessing tumour response in rectal cancer follow-up. It's quick, effective, and enhances clinical decision-making."*



**Dr. Roel Hompes**  
Colorectal Surgeon, AMC -  
Amsterdam, Netherlands

*"LumenEye® X1 offers easy access with high-definition views and excellent illumination, significantly improving pathology detection and overall image quality."*



**Dr. Eloy Espin**  
Past President ESCP, Colorectal  
Surgeon, Barcelona Spain

*"LumenEye® X1 is a game changer. High-quality imaging, easy to use, and it lets me track treatment outcomes over time with stored visuals."*

# VISUALISATION DURING ROBOTIC RESECTION

## Convenience during rectal stage

LumenEye® X1 provides clear, real-time imaging of the rectum without requiring additional setup or repositioning of robotic instruments. This allows surgeons to assess the distal margin quickly and seamlessly during the rectal phase of resection, streamlining workflow and reducing interruptions during robotic surgery.



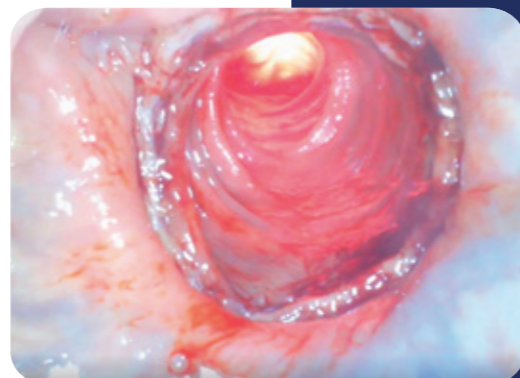
## Better visualisation data during TME (Total Mesorectal Excision)

Enhanced imaging aids in confirming the correct dissection planes and anatomy during TME. By providing direct endoluminal views, LumenEye® helps ensure precise and safe mesorectal excision, contributing to improved oncological outcomes and reduced risk of complications.



## Anastomotic health

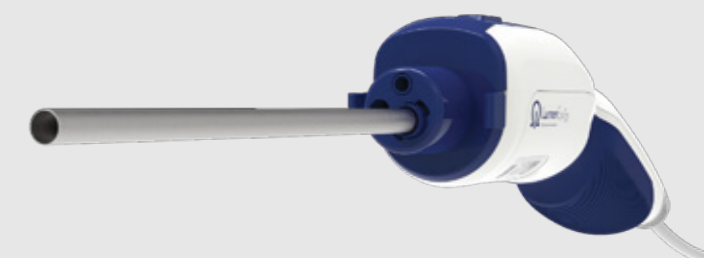
Post-resection, LumenEye® enables immediate inspection of the anastomosis for signs of bleeding, leakage, or mucosal damage. This real-time evaluation supports better intraoperative decision-making and may reduce the likelihood of postoperative complications, such as anastomotic leaks.



# BENEFITS

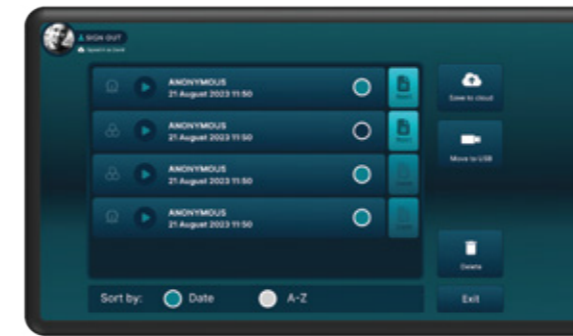
- ✓ **Cost-Effective Alternative to Flexible Scopes**  
Lower acquisition and procedure costs without compromising on image quality or clinical utility.
- ✓ **Deployable Across Care Settings**  
Portable, lightweight, and fast to set up ideal for use in the OR, ASC, outpatient clinics, or intraoperative environments.
- ✓ **Eco-Friendly, Channel-Free Design**  
Eliminates the need for complex reprocessing, reducing waste, water, energy use, and the infection risks associated with contaminated channels.
- ✓ **Rigid Shaft = Superior Rectal Landmarking**  
Offers consistent rectal straightening and improved height assessment; key for accurate lesion localization and surgical planning.
- ✓ **Single-use manifold Biopsy Access**  
Manifold design allows for targeted tissue sampling without concerns over channel cleaning or blockage.
- ✓ **Intra-operative Integration with Robotic Platforms**  
Connects with leading soft-tissue robotic systems to guide critical steps during TME, ensuring precision in rectal dissection and anastomosis assessment.
- ✓ **Secure Cloud-Based Documentation**  
Integrated with the CHiP® platform for instant capture, review, and multidisciplinary collaboration from any device.
- ✓ **Ideal for Surveillance and Re-staging**  
Easily deployed for post-op checks, cancer surveillance, and low anterior resection follow-up without burdening endoscopy units.

By seeing more, surgeons can treat more



# CHIP® SOFTWARE

The LumenEye® X1 system is provided alongside the industry leading CHIP® software; developed by SurgEase. Its intuitive UX, centred on human factors, allows users to focus on their clinical tasks whilst ensuring clinical data management and governance assurance occurs seamlessly in the background.



## Image Retrieval

View locally stored assets, including reports and images, from any SurgEase device.



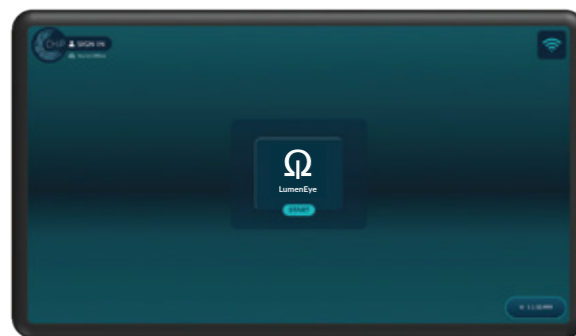
## Report Creation

To deliver flexibility for the office-based surgeon, the CHIP® software now allows report creation on the dock UI and also allows the appending of stored images to the final report. Reports can be pushed to the cloud, transferred to USB as PDF files or printed locally.



## HD View

High definition camera view with image capture, settings, and recording capabilities within the UI.



## Online vs Offline mode

The UX offers true versatility by enabling users to switch modes between 'offline', local storage of assets to 'online' cloud-based storage. Online mode assets can be retrieved from any computer via a dedicated URL.

## DATA WORKFLOW

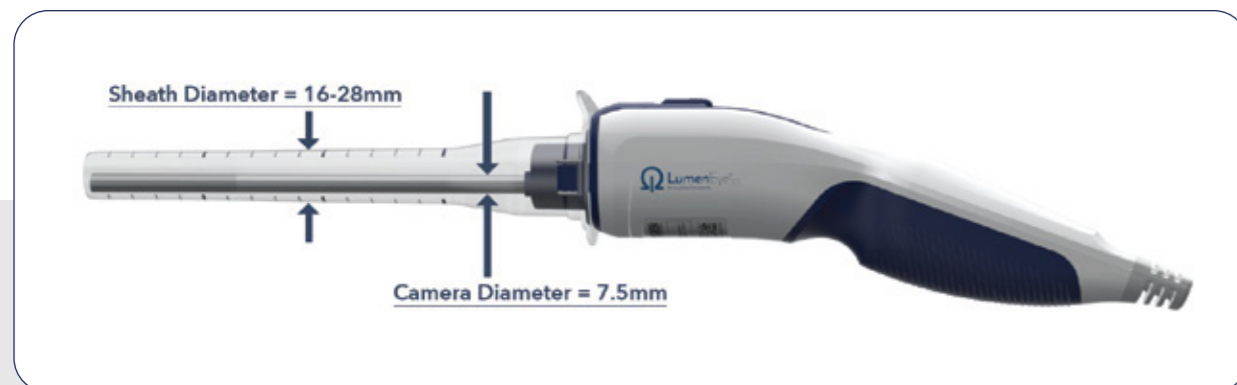


Complex care delivered through simple usability

# Device Specifications

<b>Power</b>	5V DC, 500mA
<b>Connection Type</b>	USB 3.0, type A
<b>Ingress Protection</b>	IP23
<b>LEDs</b>	White Light
<b>Device Dimensions</b>	447.75mm x 50.48mm x 80.57mm
<b>Weight</b>	300g
<b>Cord Length</b>	1824±50mm (SR to USB)
<b>Sterility</b>	Non-sterile
<b>Materials</b>	ABS Plastic (housing), 316L Stainless steel (camera stalk), TPU (bellows)
<b>RF rating</b>	Class A

Camera	
Ingress Protection	IP67
Camera Resolution	1080p
Illumination	6 built-in-White Light LEDs
Field of View	88°
Frame Rate	30 fps
Maximum Touch Temperature	51°C±2



# System Components

Feature	Description
	The portable docking case stores the device. Its sleek briefcase design allows seamless portability. The fold-up integrated 13" HD touchscreen display screen projects the full quality of the cameras for the user. The case features additional HDMI and USBA ports, power cable tidy and a handset stand used during clinical sessions.
	The LumenEye® handset, its HD camera with its recess for the bellows and single-use sheath. Its 2m power cord has a USB-3.0 A-type at its distal tip which connects to the ports located on the dock.
	The consumable pack comprises a single-use sheath with removable obturator, a biopsy manifold and cleaning swabs. The closed system, once assembled, allows air insufflation passage through a micro-filter embedded on the manifold. The superiorly placed biopsy channel allows for tissue sampling with standard off-the-shelf endoscopy biopsy forceps (not supplied).
	The CHIP® platform is a powerful electronic health record (EHR) software which provides the functionality to record images, create reports and dial users into live sessions for peer review. Users can seamlessly switch storage of assets locally to its HIPAA and GDPR compliant Cloud. Extraction of images, videos and reports to a USB drive is possible as is inter-connectivity with host EHRs.

# Engineering you can trust.

 LumenEye<sup>®</sup>X1



Approved distributor details

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**It is recommended to check the suitability of the product for the intended use prior to use. Please note the described product(s) in this brochure may not be available in all countries due to different regulatory requirements. Please reach out to SurgEase directly to confirm availability.**



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## Global HQ

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