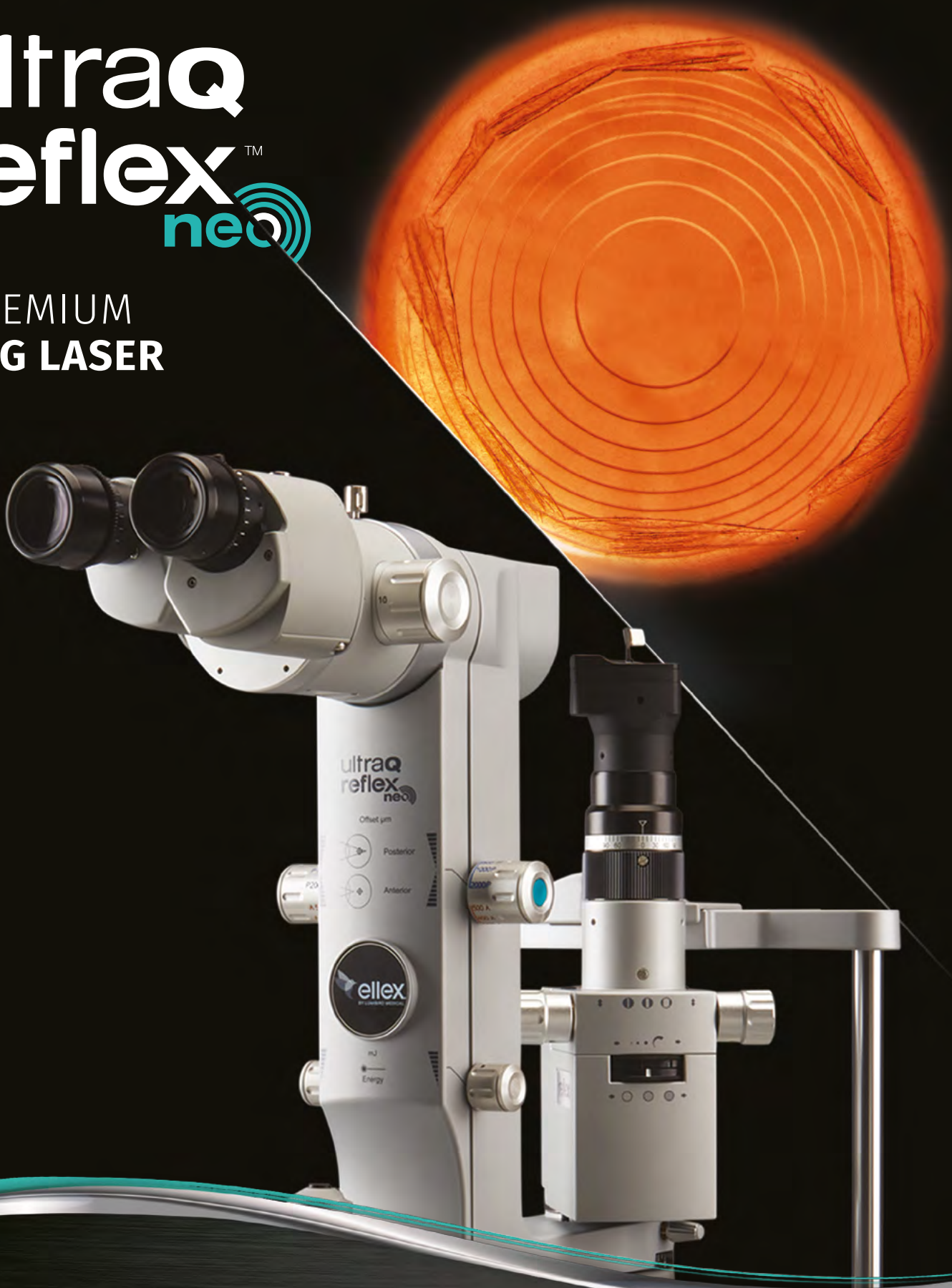
ultraQ reflex™ neo

PREMIUM
YAG LASER

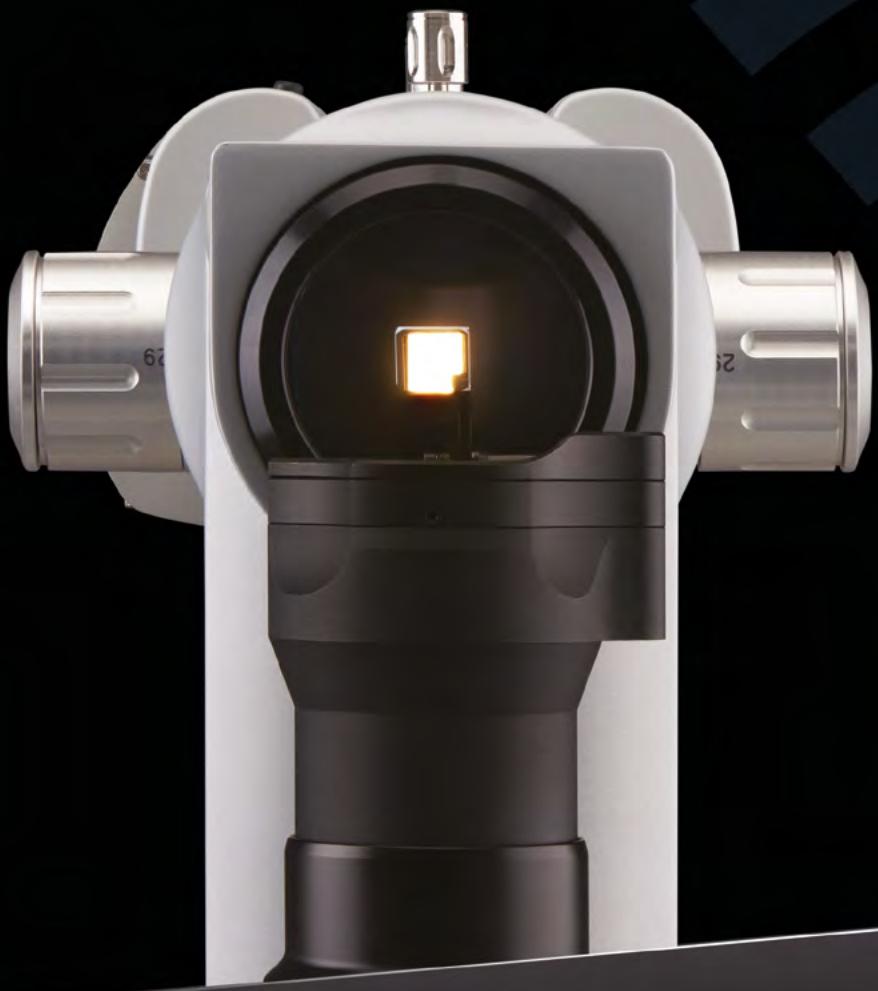


ellex®
BY LUMIBIRD MEDICAL

Setting the Standard of Care

ultraQ reflex neo™

reflex™ TECHNOLOGY



Reflex™ Technology with True Coxial Illumination (TCI™)

At the heart of **UltraQ Reflex™ Neo** lies (TCI™). Technology providing a clear and titratable red reflex across the entire width of the pupil. You will see the highest degree of contrast, edge definition and detailed shadowing of posterior capsule and other important ocular structures.

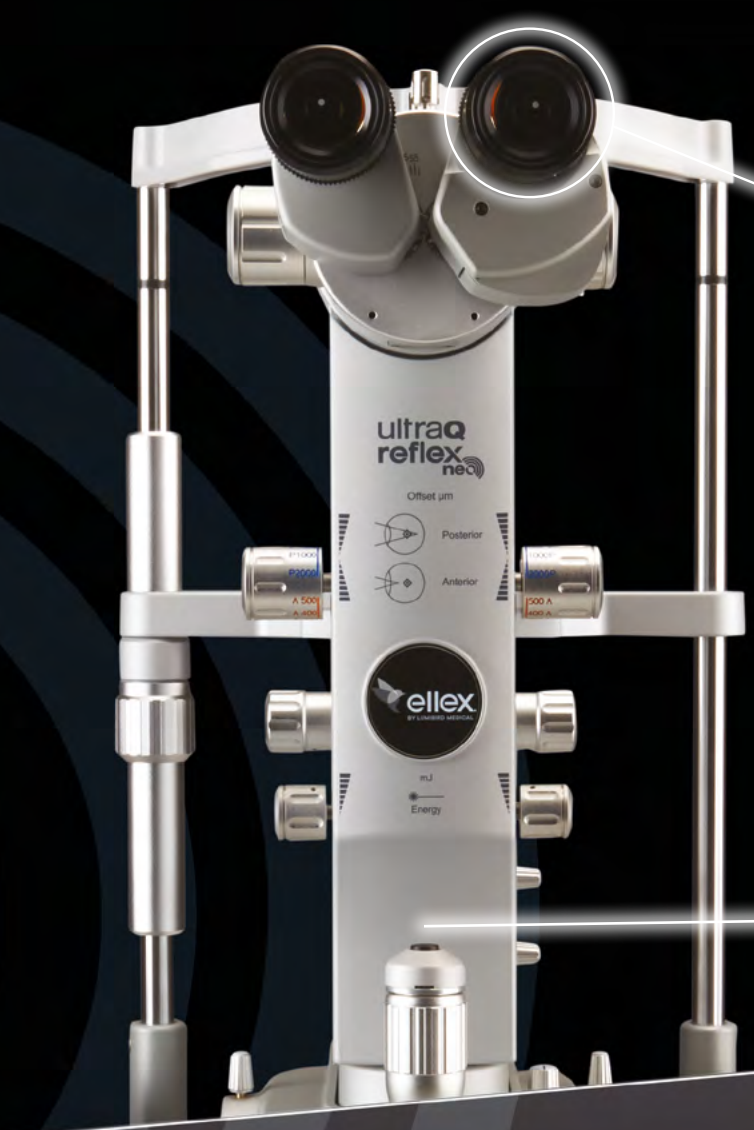
Established Reflex™ Performance

The Reflex™ illumination mirror operates in perfect synchronicity with each depression of the laser fire control switch, facilitating accurate targeting and precise laser delivery.

ELLEX® - SETTING THE STANDARD IN **PATIENT CARE**

A superior energy beam profile and precise dual, green aiming beam - fully integrated within a purpose-built slit lamp - coupled with True Coaxial Illumination™, bring visual focus, target illumination and laser treatment beams into alignment at ONE OPTICAL PLANE.

COMPLETE FOCUS, **TOTAL CONTROL**



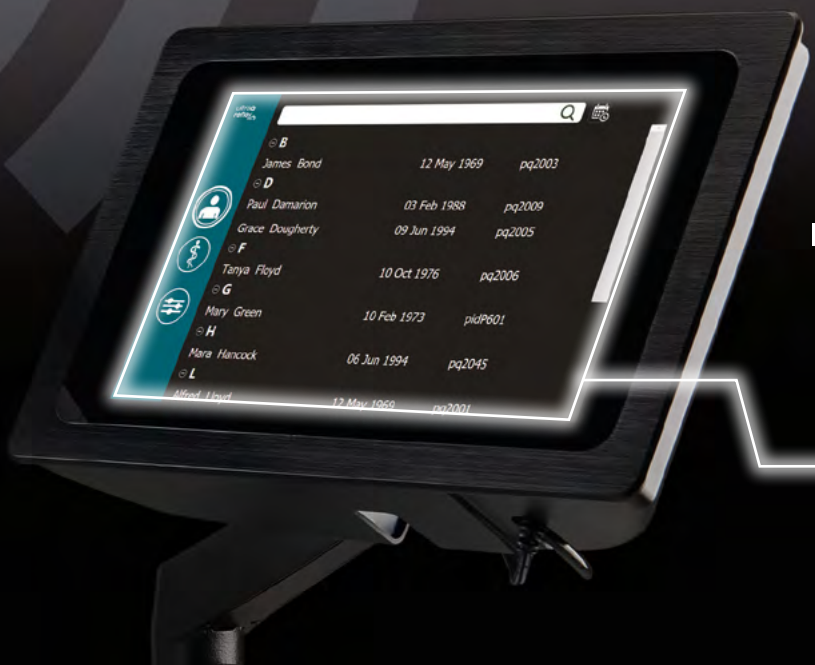
Imprint™

A real-time view of MODE and ENERGY settings.

Ellex's discrete Imprint™ - dynamic Heads-updisplay, combined with full functional control of energy settings and laser delivery from a dual function joystick, absolutely streamlines laser procedures. No distractions, complete focus, TOTAL CONTROL.

Active Cooling Cavity Technology

The active cooling cavity design of the **UltraQ Reflex™ Neo** ensures laser stability and repeatability over even the lengthiest treatment, delivering consistent laser pulses at up to 4 Hz, FOUR TIMES PER SECOND, ensuring precise dosage with every laser pulse.



Patient Management Remote Diagnostics

Intuitive, full capacitive touch-screen control with patient record management and real-time remote diagnostics.

PROcap™

Premium Refractive Outcome Capsulotomy

Fewer residual capsule fragments, IOL intact and precise capsulotomy diameters

RE-ESTABLISHING
YOUR PATIENT'S BASELINE,
BEST QUALITY OF VISION

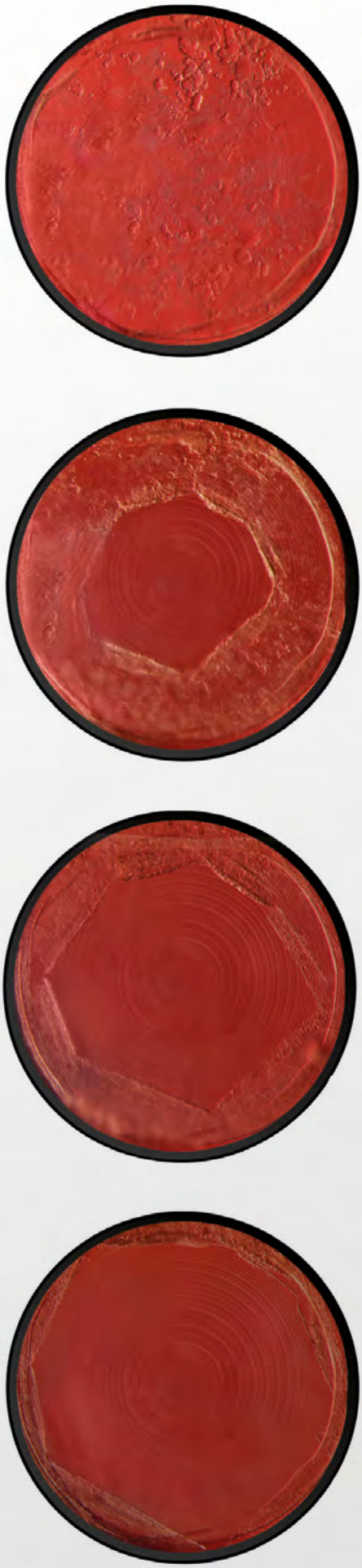


Image courtesy of Karl Brasse, MD

Extended Posterior offset

Maintain full visual focus with up to 2mm extended posterior offset.

Focus depths greater than those conventionally in use for capsulotomy produce a powerful anterior moving hydraulic jet effect, translating into neater tissue separation and superior IOL protection against ionized plasma strikes[1,2,3].

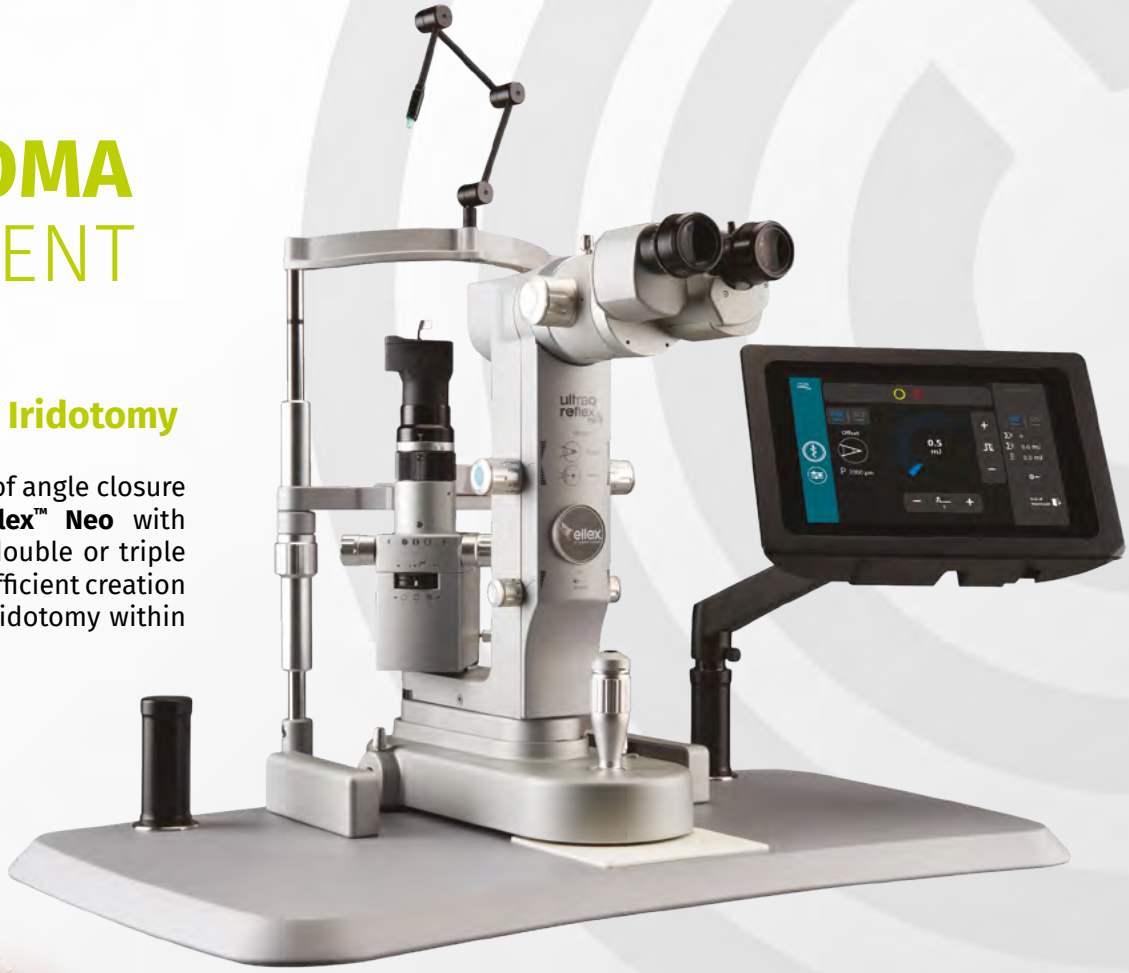
Green aiming beam & patient fixation

Improved accuracy in targeting enhances the safety profile of YAG laser treatments. A green aiming beam provides the highest degree of visual contrast for YAG laser procedures, resulting in easier target visualization and more proficient treatment delivery.

Precision incision

Ellex's proprietary YAG laser cavity with **UltraQ Reflex™ Neo**, delivers a four nanosecond Ultra-Gaussian pulse at high peak power, typically achieving the industry's lowest optical breakdown of 1.4 mJ in air [4]. The hyper-efficient laser profile designed by Ellex generates far superior and precise photodisruption of sensitive ocular tissues and better patient outcomes.

GLAUCOMA
TREATMENT



Laser Peripheral Iridotomy

For the YAG treatment of angle closure glaucoma, **UltraQ Reflex™ Neo** with burst mode provides double or triple laser impact for more efficient creation of a laser peripheral iridotomy within an iris crypt.

Laser peripheral iridotomy (LPI) is indicated to prevent or overcome a suspected relative pupillary block by creating an alternative pathway for aqueous flow. Mainly used for patients in the primary angle closure spectrum, it can also be useful in secondary angle closure glaucoma and in the management of other types of glaucoma with associated pupillary block. The iridocorneal angle should be, in all cases, carefully examined after LPI to rule out other mechanisms of a closed angle requiring treatment[5].

Summary of indications for laser peripheral iridotomy (LPI)
Acute Primary Angle Closure (APAC)
Contralateral eye in APAC
Primary Angle Closure suspect (PACS), «narrow» or «occludable» angle
Primary Angle Closure (PAC) and Primary Angle Closure Glaucoma (PACG)
Secondary Angle Closure with Pupillary Block
Plateau Iris Configuration and Plateau Iris Syndrome
Aqueous Misdirection, Cilio-lenticular block, Ciliary Block or Malignant Glaucoma

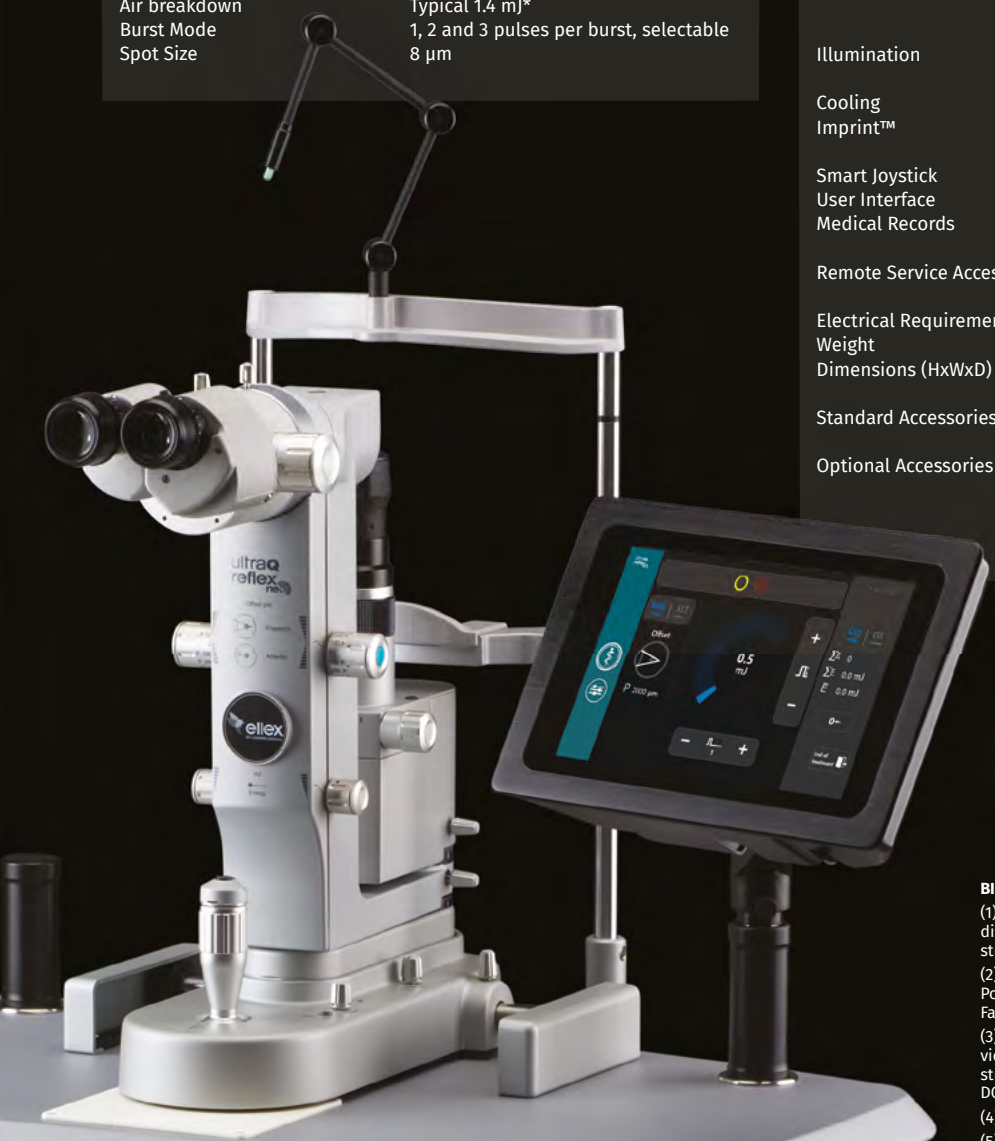
More information about treatment guidelines:
www.glaucoma-laser-assisted-solutions.com

ultraQ reflex neo™

TECHNICAL SPECIFICATIONS

PRODUCT SPECIFICATIONS

Laser Source	Q-Switched Nd:YAG
Wavelength	1064 nm
Energy	0.3 to 10 mJ per pulse, continuously variable
Pulse Width	4 ns
Air breakdown	Typical 1.4 mJ*
Burst Mode	1, 2 and 3 pulses per burst, selectable
Spot Size	8 µm
Cone angle	16°
Offset (Anterior & Posterior)	0, -500 to +2000 µm
Aiming Beam	Dual green 515 nm, adjustable intensity
Repetition Rate	Up to 4 Hertz
Magnification	10X, 17X & 29X Optimized for enhanced anterior segment visualization
Illumination	LED True Coaxial Illumination™ (Reflex™ Technology)
Cooling	Fan cooled
Imprint™	Energy and mode display within right binocular
Smart Joystick	Dual function, energy adjust and fire
User Interface	10.1" Capacitive touch screen tablet
Medical Records	Compatible with DICOM patient management system
Remote Service Access	Remote system diagnosis/ fault reporting
Electrical Requirements	100–240 VAC, 50/60 Hz, < 800 VA
Weight	26.8 kg, 59.1 lbs (laser only)
Dimensions (HxWxD)	57 X 75 X 44 cm, 23 X 30 X 18 inches (laser only)
Standard Accessories	Total Solution™ table, safety glasses, laser safety sign, dust cover
Optional Accessories	Capsulotomy and iridotomy laser lenses, footswitch, five-position magnification changer, beam splitter, "C" mount camera adapter, video camera adapter, co-observation tube



** based on system performance testing (data on file)*
Specifications are subject to change without notice
Non contractual pictures.

BIBLIOGRAPHY

(1) G. Hawlina, B. Drnovšek-Olup, J. Možina & P. Gregorčič, Photo-disruption of a thin membrane near a solid boundary:an in vitro study of laser capsulotomy, Applied Physics A, 2016

(2) Uroš Orthaber, Development And Evaluation Of A Laser For Posterior Capsulotomy - Doctoral Thesis, University Of Ljubljana Faculty Of Mathematics And Physics Department Of Physics

(3) J. C. Isselin, A. P. Alloncle, D. Dufresne & M. Autric (1997) Behavior of a cavitation bubble near a solid wall. Contribution to the study of the erosion mechanism, La Houille Blanche, 83:6, 29-33, DOI: 10.1051/lhb/1997047

(4) Based on system performance testing (data on file)

(5) https://eyewiki.aao.org/Laser_Peripheral_Iridotomy - Ana IM Miguel, Sara HM Marques, Mário Cruz, Ahmad A. Aref, MD, MBA, André Borges Silva, Jonathan C. Tsui, MD, December 25, 2022.

www.lumibird-medical.com

LASER CLASS 3B Nd:YAG: 1064nm, 55mJ Max, 4ns pulse
LASER CLASS 2 Diode Laser: 515nm, <1mW Max CW
WARNING - VISIBLE AND INVISIBLE LASER RADIATION - AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT per IEC 60825-1:2014

CE 0805

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