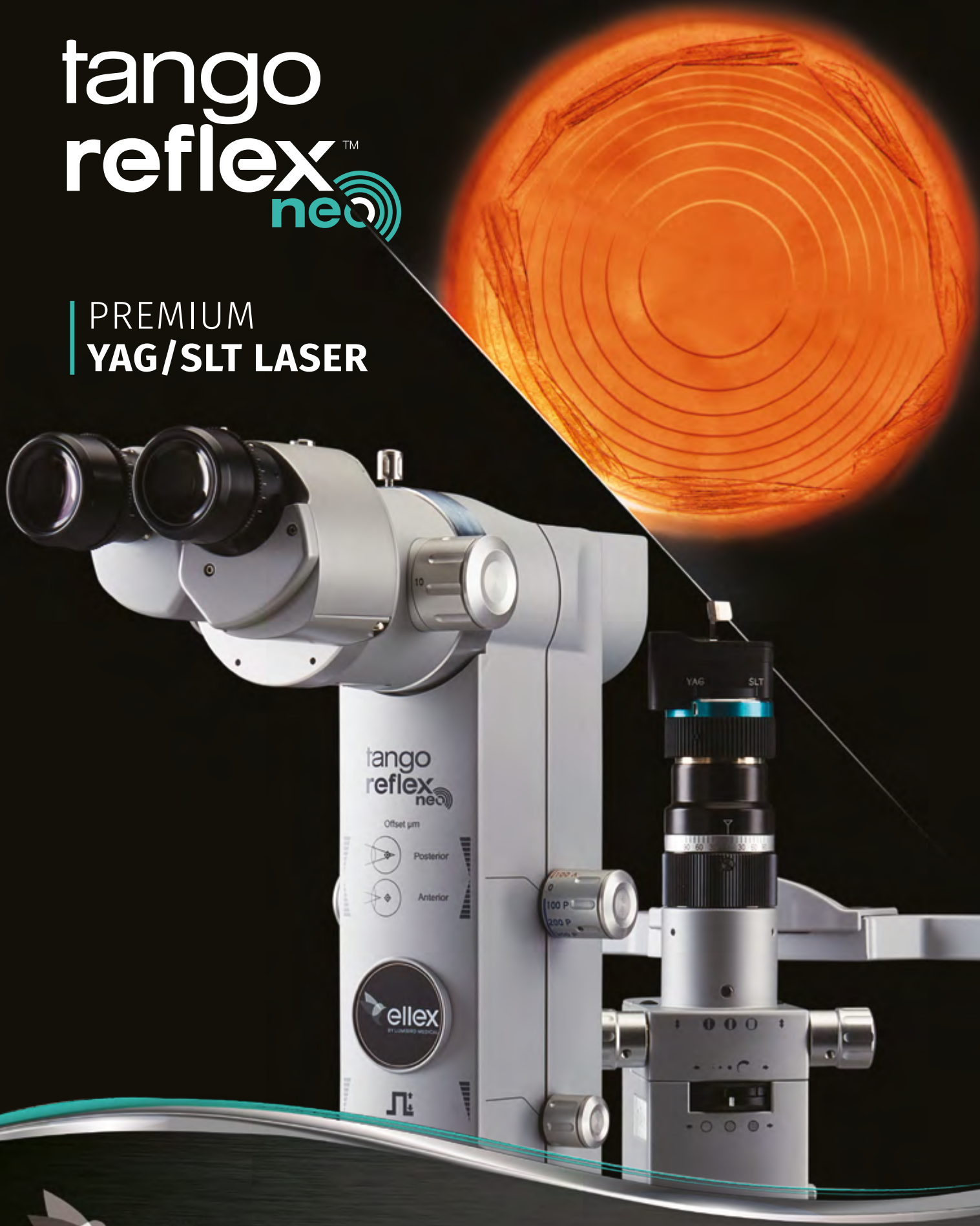
# tango reflex™ neo

## PREMIUM
## YAG/SLT LASER




ellex®
BY LUMIBIRD MEDICAL

Setting the Standard of Care

# tango reflex™ neo

reflex™ TECHNOLOGY


## Ellex Second-Generation Reflex™ Technology

With mode-specific mirror positioning and True Coaxial Illumination™, Ellex's second-generation Reflex™ design allows for titratable illumination from full, to partial or no red-reflex, giving complete spatial integrity and excellent contrast of the posterior capsule and other important ocular structures.

## Exceptional Visualization

Featuring Ellex proprietary Reflex™ Technology, **Tango Reflex™ Neo** binocular image, both on and off-axis, combined with titratable illumination, allows high-fidelity visualization of posterior capsule and other important ocular structures. This critical design feature improves clarity overall and increases certainty when performing laser treatments.

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

A superior energy beam profile and precise 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.

# ON OR OFF-AXIS TREATMENT IN **YAG & SLT MODES**


## ■ Imprint™

A real-time view of MODE and ENERGY settings.


Ellex's discrete Imprint™ - dynamic Heads-up-display, 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 **Tango 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 **Tango 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

## Iridotomy

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

## LIGHT STUDY IN FIGURES[5]

**652**
**PATIENTS RANDOMLY ASSIGNED TO SLT** (329 PATIENTS) **OR EYE DROPS** (323 PATIENTS).

**74.2%**
**OF SLT PATIENTS REACHED TARGET IOP** AND WERE DROP-FREE AT 36 MONTHS.

**5 TIMES LESS MEDICATION-DROP RELATED ADVERSE EVENTS* WITH SLT.**
**Aesthetic side effect or ocular reactions*

## SLT

For the treatment of primary open angle glaucoma and ocular hypertension, **Tango Reflex™ Neo** incorporates Ellex's proprietary SLT technology providing superior energy control, an homogenous sharp-edged aiming beam and the industry's fastest laser firing rate of up to 4 Hz - FOUR SHOTS PER SECOND.

- Compliance with medication is key and can be extremely problematic[6].
- SLT takes compliance out of the patient's hands and is a REPEATABLE laser therapy[7].
- EGS Recommendation: SLT can be offered as a first-choice treatment for open angle glaucoma[8].
- Strength of Recommendation: Strong.

More information about SLT:
**www.glaucoma-laser-assisted-solutions.com**

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## TECHNICAL SPECIFICATIONS

| SLT MODE | |
|---|---|
| Laser Source | Q-switched, frequency doubled Nd:YAG |
| Wavelength | 532 nm |
| Energy | 0.3 to 2.6 mJ per pulse, continuously variable |
| Pulse Width | 3 ns |
| Burst Mode | Single pulse only |
| Spot Size | 400 µm |
| Aiming Beam | Red 635 nm, adjustable intensity |

| YAG MODE | |
|---|---|
| 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[4] |
| Burst Mode | 1, 2 and 3 pulses per burst, selectable |
| Spot Size | 8 µm |
| Offset (Anterior & Posterior) | 0, -500 to +2000 µm |
| Aiming Beam | Dual green 515 nm, adjustable intensity |

| COMMON FEATURES SPECIFICATION | |
|---|---|
| Repetition Rate | Up to 4 Hertz |
| Magnification | 10x 17x 29x<br>Optimized for enhanced anterior segment visualization |
| Illumination | LED True Coaxial Illumination™ (Reflex™ Technology) |
| Cooling | Fan cooled cavity |
| Imprint™ HUD Display | 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 systems |
| Remote Service Access | Remote system diagnosis/ fault reporting |
| Electrical Requirements | 100–240 VAC, 50/60 Hz, <800 VA |
| Weight | 27.5 kg, 60.6 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 | SLT laser lens, capsulotomy and iridotomy laser lenses, footswitch, five-position magnification changer, beam splitter, "C" mount camera adapter, video camera adapter, co-observation tube |

*Specifications are subject to change without notice*



**BIBLIOGRAPHY**

(1) G. Hawlina, B. Drnovšek-Olup, J. Možina & P. Gregorčič, Photodisruption 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) Brasse K, Der laser Kann Viel Mehr Als Nur Nachstar Und Iridotomie, Eyeland Design Network, 2022

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

(5) Gazzard G, Konstantakopoulou E, Garway-Heath D,et al. Selective laser trabeculoplasty versus eye drops for first-line treatment of ocular hypertension and glaucoma (LiGHT): a multicentre randomised controlled trial. Lancet 2019, Mar 9;393(10180):1505-16.

(6) Reardon G, Kotak S, Objective assessment of compliance and persistence among patients treated for glaucoma and ocular hypertension: a systematic review. Epub 2011 Sep 23. PMID: 22003282; PMCID: PMC3191921.

(7) Garg A, Vickerstaff V, et al. Efficacy of Repeat Selective Laser Trabeculoplasty in Medication-Naive Open-Angle Glaucoma and Ocular Hypertension during the LiGHT Trial. Ophthalmology. 2020 Apr;127(4):467-476. doi: 10.1016/j.ophtha.2019.10.023. Epub 2019 Oct 30. PMID: 32005561.

(8) European Glaucoma Society Terminology and Guidelines for Glaucoma, 5th Edition. Br J Ophthalmol. 2021 Jun;105(Suppl 1):1-169. doi: 10.1136/bjophthalmol-2021-egsguidelines. PMID: 34675001.


www.lumibird-medical.com

LASER CLASS 3B Nd:YAG: 1064nm, 55mJ Max, 4ns pulse & Nd:YAG: 532nm, 6mJ Max, 3ns pulse
LASER CLASS 2 Diode Laser:635nm, <1mW Max CW & 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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