

# integre<sup>®</sup> pro

Laser Range

SINGLESLOT  
PATTERN  
SCANNING



 **ellex**  
BY LUMIBIRD MEDICAL

Retinal Photocoagulation

# Integre<sup>®</sup> pro Laser range

## 2 PHOTOCOAGULATION MODES

Integre<sup>®</sup> Pro laser range includes an extensive range of fully integrated systems, offering a wide array of parameters, tailored to the treatment of retinal pathologies.

Integre<sup>®</sup> pro

SingleSpot  
technology



Integre<sup>®</sup> pro scan

Pattern  
scanning  
technology



## HIGH PRECISION PERFORMANCE

The purpose-built Integre<sup>®</sup> Pro slit lamp, which channels the laser directly through the slit lamp optics for better visualization and optimal illumination, is optimized for use in the posterior segment.

All controls — **spot size**, **power**, **shot duration** and **micromanipulator** — are conveniently located, right at your fingertips.

## SINGLE OR DUAL-WAVELENGTH LASER

Whether positioning focal treatment in the macular area, or performing PRP in the periphery, Integre<sup>®</sup> Pro lasers provide a comprehensive wavelength choice to treat a wide range of retinal conditions.<sup>[5]</sup>

The following wavelength configurations are available:



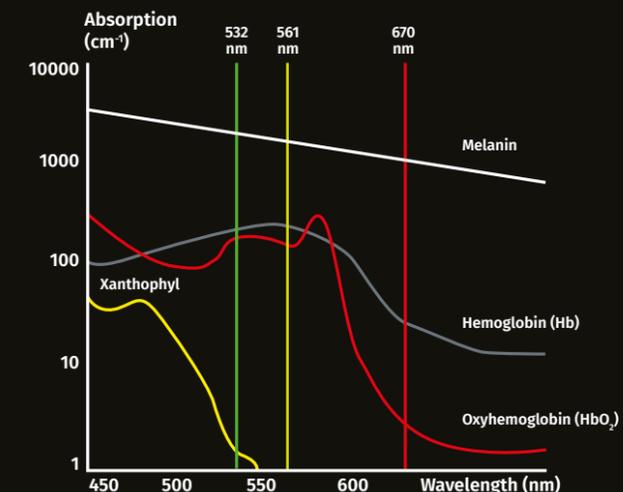
GREEN CONFIGURATION (532 nm)



YELLOW CONFIGURATION (561 nm)



YELLOW-RED CONFIGURATION (561 nm and 670 nm)



## UNIFORM ENERGY DISTRIBUTION

Integre<sup>®</sup> Pro's proprietary dual-mode laser cavity delivers uniform energy distribution across the full spot diameter, eliminating hotspots and achieving optimal, homogenous burns\*.

Whether you are positioning focal treatment in the macular area, or performing PRP in the periphery, it's a key design feature that enables you to achieve consistent, predictable treatment outcomes across a broad range of pathologies.

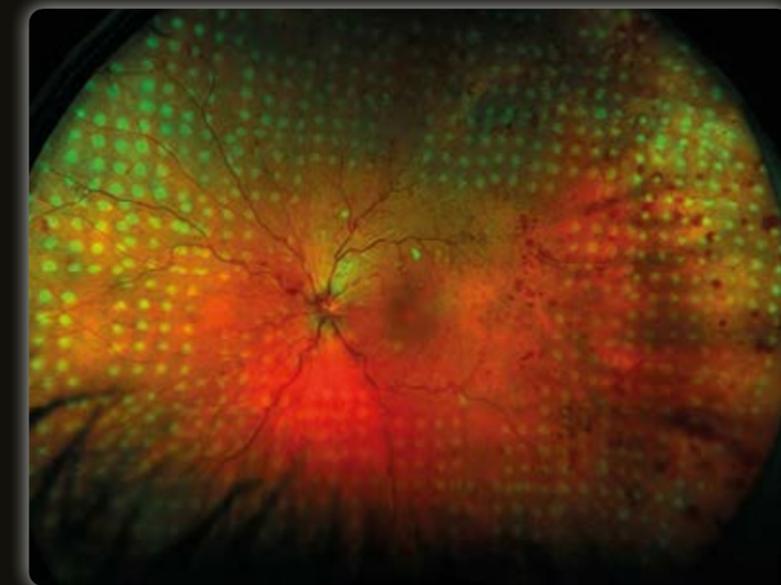
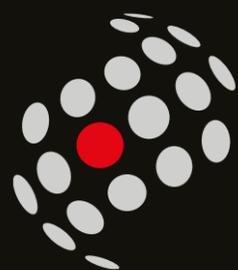


Image provided by Dmitri Yellachich, MD (Australia)

## integre<sup>®</sup> pro



### SingleSpot technology

Characterized by the use of long pulse durations (100-200ms), Integre<sup>®</sup> Pro offers customizable shooting modes for the implementation of thermal treatments such as leaking blood vessels sealing (focal laser photocoagulation): Single, repeat, continuous, etc.

## integre<sup>®</sup> pro scan



### Pattern Scanning technology

Characterized by the use of short pulse durations (10-20ms), Integre<sup>®</sup> Pro Scan offers many advantages over conventional photocoagulation in retinal treatments such as panretinal photocoagulation (PRP):

- Less heat diffusion to the retina and choroid, less damage to the retinal nerve fiber layer [1,2]
- Comfortable treatment is better tolerated by patients [3]
- Extremely fast treatment (full PRP in 1 session) [4].

The treatment mode can be delivered through customizable patterns for better adaptation to the treatment site:



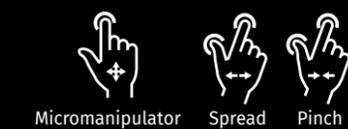
## DESIGNED WITH YOU IN MIND

Highly intuitive tablet and all-in-one laser/slit lamp interface that's been designed exactly with your needs in mind.

User-friendly touchscreen interface means you can adjust all treatment parameters, including laser power, pulse duration, pattern selection and pattern size quickly and easily.



An intuitive track pad enables easy navigation of the retina and adjustment of treatment settings and pattern characteristics.



# Integre<sup>®</sup> pro

## Laser Range

### TECHNICAL SPECIFICATIONS

Laser Source	Solid-state laser diode and cavity
Wavelength	1 Yellow-red configuration: 561 nm and 670 nm 2 Yellow configuration: 561 nm 3 Green configuration: 532 nm
Power at the fiber port	Red: 1 watt. Yellow: 1.5 watts. Green: 1.5 watts
Power at the cornea	Red: 50 – 1000 mW, Yellow: 50 – 1500 mW, Green: 50– 1500 mW
Aiming Beam	Red 635 nm, adjustable intensity
Magnification	6x, 10x, 16x, 25x, 40x
Electrical Requirements	100-240 VAC, 50/60 Hz, 800 VA
Cooling	Air cooled

	Integre <sup>®</sup> Pro	Integre <sup>®</sup> Pro Scan
Exposure Time	10 ms to 8.0 s	Pattern Scanning mode: 10 to 30 ms SingleSpot mode: 10 ms to 8.0 s
Spot Size	50 to 1000 µm, continuously variable	Pattern Scanning mode: 100 to 500 µm, continuously variable SingleSpot mode: 50 to 1000 µm, continuously variable
Repeat Mode	50 ms to 1.0 s	Pattern Scanning mode: N/A, SingleSpot mode: 50 ms to 1.0 s
Weight	32kg, 71 lbs. (laser only)	35kg, 77 lbs. (laser only)
Dimensions (HxWxD)	62 x 76 x 47 cm, 24 x 30 x 19 inches (laser only)	62 x 76 x 47 cm, 24 x 30 x 19 inches (laser only)

Specifications are subject to change without notice. Non contractual pictures.

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- 3- Hussainy S Al, Dodson PM and Gibson JM. Pain response and follow-up of patients undergoing panretinal laser photocoagulation with reduced exposure times. Eye. 2008; 22, 96-99
- 4- Muqit MM, Marcellino GR, Henson DB et al. Single-Session vs Multiple-Session Pattern Scanning Laser Panretinal Photocoagulation in Proliferative Diabetic Retinopathy. Arch Ophthalmol. 2010;128(5):525-533
- 5- Mainster MA. Wavelength selection in macular photocoagulation. Tissue optics, thermal effects, and laser systems. Ophthalmology.1986;93:952-958.



LASER CLASS 4  
Nd:DPSS 532nm, 2W, 8s, CW (max)  
Nd:DPSS 561nm, 2W, 8s, CW (max)  
Nd:DPSS 670nm, 1.35W, 8s, CW (max)

LASER CLASS 2  
Diode laser, 635nm, <1mW, CW

**DANGER – LASER RADIATION AVOID EYE OR SKIN  
EXPOSURE TO DIRECT OR SCATTERED RADIATION**  
CLASS 4 LASER PRODUCT per IEC60825-1:2014

CE  
2797

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