

# LIGHTLas 577

YELLOW LASER PHOTOCOAGULATOR  
with SP-Mode®



THE NEW GOLD STANDARD IN  
DEPENDABILITY, INTEGRATION  
AND PERFORMANCE



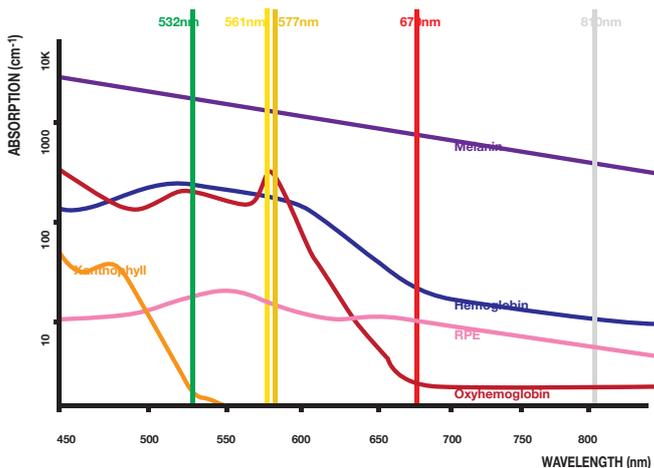
# SUPERIOR PERFORMANCE IN TRUE YELLOW



Recognized as the new gold standard in laser therapy, LIGHTLas 577 increases clinical efficiency and delivers unparalleled safety. The high-performance true yellow wavelength enables delivery of safer, faster and more controlled treatments.

## Optimum Absorption by Oxyhemoglobin

- **Absolute Control:** Provides low light scattering in intraocular transit for increased accuracy and superior transmission.



- **Reduced Power:** Typically requires 50% less power to achieve the same therapeutic effects as conventional green laser photocoagulation.

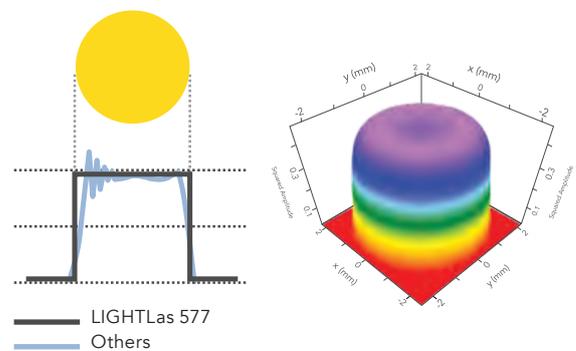
## Negligible Absorption by Xanthophyll Pigments

- **Closer Approach:** Significantly increases the safety margins for macular treatment with immediate access to fovea when compared to other wavelengths.
- **Minimized Thermal Damage:** Decreased thermal spread to reduce functional damage and scar enlargement.

## Consistent Power Delivery Across Life Span

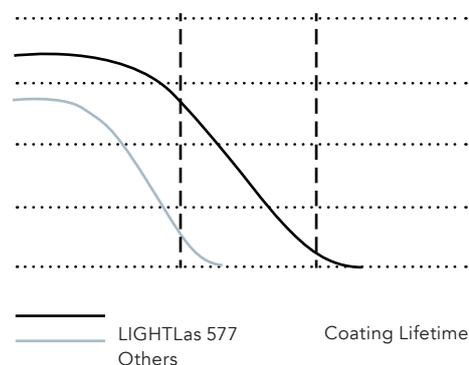
- **Laser Cavity Bonding:** Patented design with a 2.0 W laser cavity assures exceptional life span and stability of the system.
- **Instant Duty-Cycle Circularity:** This feature assures stable and uniform treatment profile for maximized clinical outcomes.

### Output Stability and Energy Density



- **Superior Laser Crystal Coating:** The advanced coating technology offers 10 times higher damage threshold than most conventional photocoagulators. This superior coating enables advanced energy stability over prolonged use.

### Laser Life Span



# NEXT-GENERATION OPTIONS



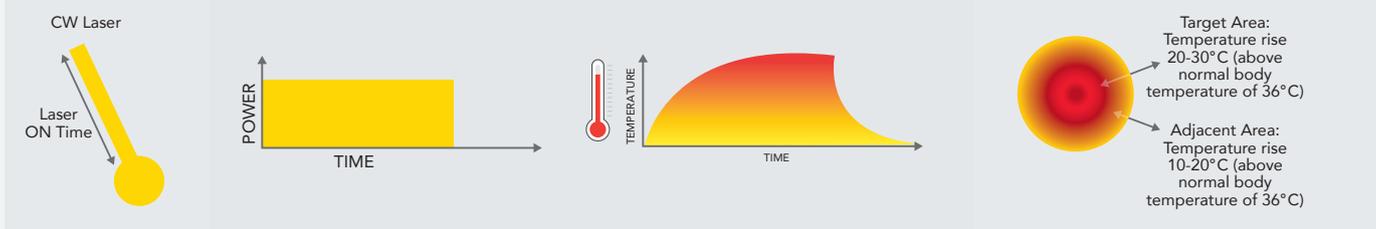
In addition to delivering clinically superior performance, LIGHTLas 577 can help optimize patient outcomes with the use of traditional continuous wave or our exclusive next-generation SP-Mode® Microsecond Laser Technology.

## SP-Mode® Microsecond Laser Technology

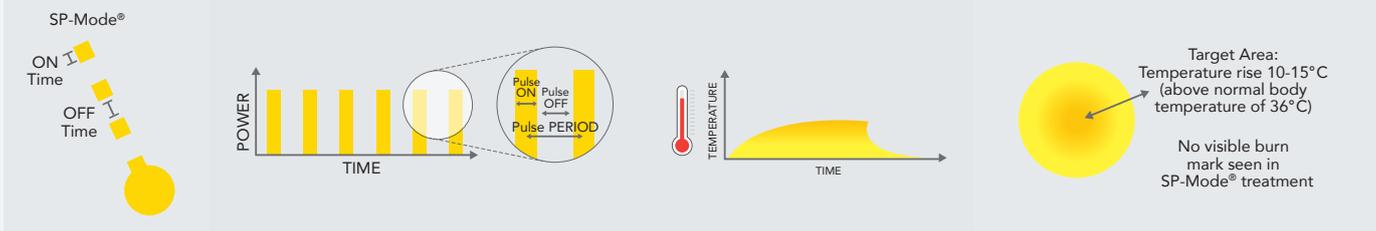
The latest innovation in LIGHTMED laser therapy, SP-Mode® offers a groundbreaking treatment approach to achieving optimal clinical outcomes. Ongoing studies show that physicians are now able to:

- Eliminate laser-induced thermal tissue damage and treatment side effects
- Deliver a broader range of treatment modalities
- Treat disorders at a much earlier stage
- Provide repeat treatment in retinal and glaucoma applications

### Conventional Continuous Wave (CW) Treatment



### SP-Mode® Microsecond Laser Technology



### LIGHTLas 577 - Yellow Laser

|                 |  |   |
|-----------------|--|---|
| <b>GLAUCOMA</b> | <ul style="list-style-type: none"> <li>• Primary Open Angle Glaucoma</li> </ul>  | <ul style="list-style-type: none"> <li>• SP-Mode® Laser Trabeculoplasty (SPLT)</li> <li>• Laser Trabeculoplasty</li> </ul>  |
| <b>RETINA</b>   | <ul style="list-style-type: none"> <li>• Proliferative Retinopathy (Diabetic, Retinal Vein Occlusion)</li> <li>• Macular Edema</li> <li>• Barricade of Retinal Tears/Lattice Degeneration/Detachments</li> <li>• Sub-Retinal (Choroidal) Neovascularization</li> </ul> | <ul style="list-style-type: none"> <li>• Pan Retinal Photocoagulation (PRP)</li> <li>• Retinopexy</li> <li>• Endophotocoagulation</li> <li>• Focal Treatment</li> <li>• Grid Treatment</li> </ul> |
| <b>MACULA</b>   | <ul style="list-style-type: none"> <li>• Diabetic Macular Edema (DME)</li> <li>• Central Serous Chorioretinopathy (CSC)</li> </ul>   | <ul style="list-style-type: none"> <li>• SP-Mode® Macular Laser Treatment</li> </ul>  |

# DEPENDABILITY MEETS EASE OF USE



Compact and efficiently designed to maximize workspace and optimize workflow, the LIGHTLas 577 provides a dependable, easy-to-use platform to help meet and enhance your treatment goals.

## Superior Slit Lamp Option

Recognized as one of the world's finest slit lamp laser integration systems, the LIGHTMED system provides outstanding control, increased safety, and enhanced clinical flexibility.

- 50-1000  $\mu\text{m}$  for continuous variable spot size control
- True parfocal optical system provides superior energy distribution and clinical versatility
- Optical design and superior lenses allow a larger field of view and a precise, crystal-clear view of the retina
- Provides an unobstructed, variable working distance between objective lens and patient for improved comfort
- LED slit lamp illumination offers lasting performance with a cooler light for "easier on the eyes" treatments and increased patient comfort



LaserLink Integrated Slit Lamp with Motorized Stand



## Portable Space-Saving Design

- **Small and Sleek Design:** Compact footprint provides additional workspace and can be easily integrated into any clinic or operating room workstation.
- **Convenient and Portable:** Each LIGHTLas 577 includes a portable carrying case to move between different locations.

## Intuitive Touch Screen Technology

- **User-Friendly:** Easy-to-read 7" backlit LCD touch screen includes menus with simple selection and treatment settings.

## Wireless Foot Pedal With Power Control

- **Ergonomically Designed:** Foot pedal allows for hands-free operation for increased visual focus. A simple tap adjusts treatment power settings quickly and easily.



# ULTIMATE INTEGRATION

LIGHTLas 577 offers a selection of combinations to address retinal and glaucoma diseases. Dual and tri combo laser integration and unique slit lamp option help maximize control, improve safety, and enhance clinical outcomes.



## Dual and Tri Combo Laser Integration

LIGHTLas 577 works with the LIGHTLas YAG-V, LIGHTLas SLT and LIGHTLas SLT Deux-V to form a powerful and complete photocoagulator/photodisruptor/SLT workstation—all with vitreolysis.

## Range of Slit Lamp Delivery Adapters

Engineered with automatic recognition of delivery devices and treatment modes for simple selection and safer application, the LIGHTLas 577 includes an extensive range of slit lamp delivery adapters (SLAs) to fit most Haag-Streit style (with clones) and LIGHTMED slit lamps.

## Keeler Vantage Laser Indirect Ophthalmoscope (LIO) Compatibility

Integrated LED LIO provides unique controls of aperture size and spot positioning for enhanced, precise viewing.

- **Cooler LED Color:** Provides brighter illumination for easier visibility of retinal pathologies.
- **HiMag Lens:** Offers high quality stereoscopic images with 1.6X additional magnification.
- **Intelligent Optical System (IOS):** Allows physician to select one of three aperture sizes, and optics auto-adjust via the IOS.



## LIGHTLas 577 TECHNICAL SPECIFICATIONS

|  |   |
|--|---|
| <b>MODEL</b>   | <b>LIGHTLas 577 YELLOW LASER PHOTOCOAGULATOR</b>  |
| <b>Laser System</b>                                    | Optically Pumped Semiconductor Laser (OPSL) true CW and SP-Mode®  |
| <b>Safety Classification</b>                           | Class 4   |
| <b>Wavelength</b>                                      | 577 nm yellow   |
| <b>Power Output</b>                                    | 0.05 – 2.0 W, continuously variable   |
| <b>Max Power at Cornea</b>                             | 2.0 W (Endo, LIO, and SLA at all spot sizes)  |
| <b>Pulse Duration</b>                                  | 0.01 – 3.0 s, continuously variable   |
| <b>Pulse Interval</b>                                  | Variable from 0.01 – 3.0 s, and continuous  |
| <b>SP-Mode® Settings (Sub-Threshold Laser Therapy)</b> | <b>Duration:</b> 150 µs – 600 µs (in 50 µs increments) <b>Duty cycle:</b> 5% – 30% (in 2.5% increments)<br><b>Period:</b> 1400 µs – 1850 µs (in 50 µs increments) |
| <b>Cooling</b>   | Auto Fan & TEC's for Laser & Crystal  |
| <b>Treatment Spot Size</b>                             | 50 - 1000 µm Integrated Version   |
| <b>Aiming Beam</b>                                     | Laser diode 635-650 nm red, 0.1 – <1 mW, max. power 1.0 mW  |
| <b>Slit Lamp Illumination</b>                          | LED XLamp® XM-L2 2.85 V 10 W  |
| <b>Aiming Laser Safety Classification</b>              | Class 2   |
| <b>Dimensions (Laser Console)</b>                      | 13 cm (H) x 36 cm (W) x 33 cm (D)   5.1 in (H) x 14.5 in (W) x 12.9 in (D)  |
| <b>Weight (Laser Console)</b>                          | 12 kg   26.4 lbs  |
| <b>Power Requirements</b>                              | 100-230 VAC, 50-60 Hz Auto Ranging  |

## LASER INDIRECT OPHTHALMOSCOPE

|                           |  |
|---------------------------|--|
| <b>Indirect Model</b>     | Keeler Vantage   |
| <b>Retinal Spot Size</b>  | 1100 µm, measured at 280 mm from the front face of the LIO |
| <b>Illumination Power</b> | From laser console or stand alone power source             |
| <b>Fiber Length</b>       | 3 m  |
| <b>Weight</b>             | 800g   |
| <b>Safety Filter</b>      | Fixed filter OD 4 @ 577 nm                                 |

Specifications are subject to change without notice. LIGHTMED devices are made strictly in accordance with the international laser safety regulations and standards: EN60601-1, EN60601-1-1, EN60601-1-1-2, EN606901-2-22, IEC 60825-1

## Optional Accessories

- Endoprobes (straight, flexible, illuminated) 20G, 23G, 25G, 27G
- TruSpot Slit Lamp Adaptor (SLA) for Haag-Streit (analogues)
- TruSpot Slit Lamp Adaptor (SLA) for LIGHTLas YAG-V, LIGHTLas SLT, and LIGHTLas SLT Deux-V
- LaserLink Integrated Slit Lamp (SL980)
- Keeler Vantage Laser Indirect Ophthalmoscope (LIO)
- Wireless power control foot pedal
- Motorized and fixed safety filter for microscopes
- Mobile SMART Cart

