LIGHTLas 577

YELLOW LASER PHOTOCOAGULATOR

More effective, safer and faster treatment

LIGHTMED

Enlightening Vision

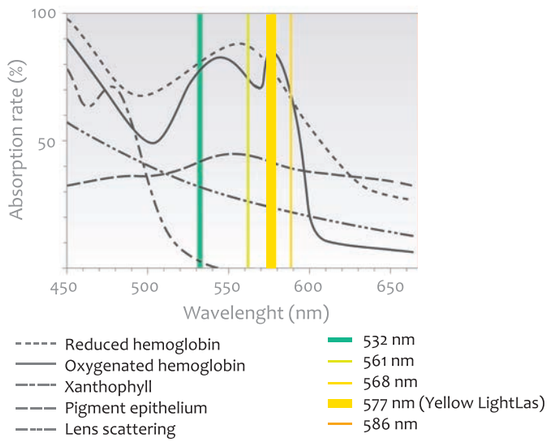
LIGHTLas 577

Safer, more efficient and flexible treatment

LighLas577 offers novel and next-gen possibilities, bridging unmatched technology with innovation of Micro Pulse and Continuous Wavelengths, in true-yellow Laser Photocoagulator. The system exhibits unparalleled safety, increased clinical efficiency coupled with a powerful, durable and versatile laser.

Unmatched Laser Absorption Properties:

- **Yellow wavelength has optimum absorption by Oxyhemoglobin:**
  - Exhibits low light scattering in intraocular transit, treatment is more accurate with superior transmission though opacities and enhanced tissue targeting.
  - As a result of low light scatter and peak oxyhemoglobin absorption, typically 50% less power is required to achieve the same therapeutic effects as with conventional green laser photocoagulation.
  - Resulting is safer, more controllable, faster treatment with little patient discomfort and better post-op recovery.
- **Yellow wavelength demonstrates negligible absorption by Macular Xanthophylls:**
  - Significantly Increases the safety margins for macular treatment, allowing much closer approach to fovea than traditional green 532, argon514 or pseudo yellow 561nm / 586nm lasers.
  - Results in less thermal spread, minimizing functional damage and scar enlargement.



Superb Slit Lamp Integrated System

LightLas577 uniquely integrates with an optimised ultra high quality slit lamp, resulting in superb system , with outstanding controls, enhances and clinical efficiency.

- True-Parfocal delivery system providing superb energy density.
- 50-1000µm continuously variable spot size controls with inbuilt micromanipulator.
- Internal safety filters allow unobstructed viewing and superior working distance
- Superior Optic Slit Lamp for enhanced diagnosis.
- Allows easy disconnection of laser console and portability to OR for use with Endoprobes.

Micro Pulse Photocoagulation:

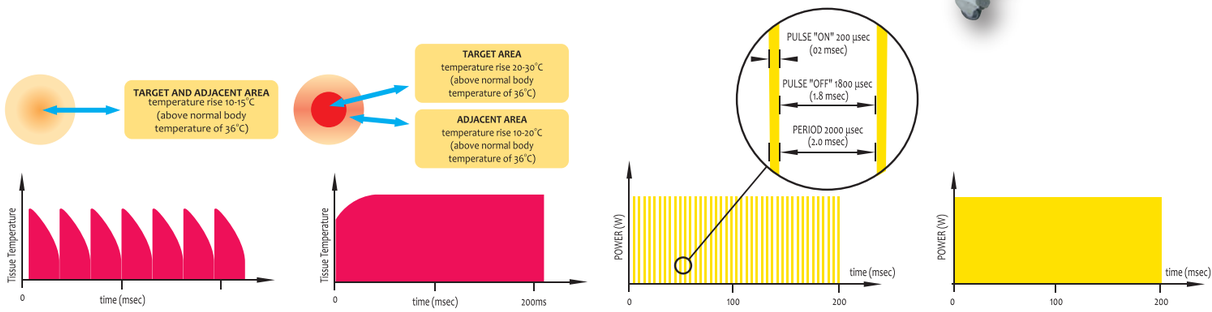
Micro Pulse (also known as Sub Threshold) photocoagulation offers a novel and revolutionary approach to treatment of numerous retinal disorders with far greater safety margins and versatility of continuous wavelength lasers.

- Micro Pulse prevents laser induced thermal retinal damage and related treatment side effects.
- Does not coagulate but stimulates the RPE to function better, releases the cytokines that modify the geneticexpression and the production of VEGFs.
- Non Collateral sparing destruction of healthy tissue
- Ideal for Treatments in the Macular region
- Completely Painless
- Repeatable, allowing early stage disease treatment
- Research on Micro Pulse has demonstrated efficacy on alarge number of clinical applications far exceeding thoseof conventional lasers such as:
  - Diabetic Macular Edema
  - Macular Edema Secondary to Retinal Vein Occlusion
  - Proliferative Diabetic Retinopathy
  - Micro Pulse Laser Trabeculoplasty (MLT)

Dual and Tri Laser Combination

LightLas577 uniquely integrates with the LightLas SLT and YAG Lasers forming a complete and powerful Photocoagulator / Photodisruptor / SLT workstation.

- Unmatched clinical versatility
- Space saving system with efficiency functional laser work station.
- Reduces the costs of ownership



Example of a typical 200ms exposure enveloping 10% micro pules duty cycle in comparison with 200ms conventional continous wavelength mode,their accumulative tissue temperature increase.

Advanced LCD Touch Screen Interface

7" backlit color LCD touch screen has intuitive menus with easy selection and treatment settings.

- Enhances working space and offers easy access to all laser controls.
- Convenient in use and space saving.

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TECHNICAL SPECIFICATIONS	LIGHTLas 577 YELLOW LASER PHOTOCOAGULATOR
Laser system	OPSL True CW & Micro Pulse
Safety Classification	Class 4
Wavelength	Yellow (577 nm)
Power Output	50mw - 2.0W (continuously variable SmartControl™ increments)
Max Power at cornea	2.0W (for Endo, LIO & SLA at all spot sizes)
Pulse Duration	0.01 – 3.0s
Pulse Interval	0.1 – 3.0, & Continuous
Micro Pulse Settings	MP Duration: 200µs MP Duty Cycle: 10% MP Pulse Period: 1800µs
Cooling	Auto Fan & TEC's for Laser & Crystal
Treatment spot size	50 to 500µm Contiguously Variable or Stepped 50 - 1000µm Contiguously Variable (Integrated Version)
Aiming beam	Laser diode 635 nm, red 0.1 - <1mW
Safety Classification	Class 2
Dimensions (laser console)	13cm (H) x 36cm (W) x 33cm (D) 5.1" x 14.5" x 12.9"
Weight (laser console)	12kg 26.4lbs
Power Requirements	100-230VAC, 50-60Hz Auto-Ranging

NOTES: Specifications are subject to change without notice. ©2012, LightMed Corporation.
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LightMed devices are made strictly in accordance with the international laser safety standards:
EN60601-1, EN60601-1-1, EN60601-1-1-2, EN606901-2-22, IEC 60825-1
Rev: DCA 63001

REFERENCES: (1). True Yellow 577 for the Treatment of Retinal Disorders: Searching for the Holy Grail.
Robert P. Murphy. Insert to Retina today, April 2010;
(2) Wavelength selection in macular photocoagulation. Tissue optics, thermal effects, and laser systems Martin A. Mainster, American Academy of Ophthalmology. Volume 93, Issue 7, Pages 952-958 (1 July 1986);
(3) Continuous-wave and Micropulse 577nm Yellow Laser Photocoagulation: A Laser fo all reasons. Martin A. Mainster, Insert to Retina today, April 2010;
(4). Maia, A. Micropulse Treatment for Central Serous Retinopathy. Insert to Retina Today, April 2010

ACCESSORIES

TRUSPOT SLIT LAMP ADEPTER
- True Parfocal 50-500µm, continuously variable spot size
- 50-500µm stepped spot size with micromanipulator option.
- Excellent, power density distribution over the treatment spot.
- Superior safety filter providing enhanced view of the retina.
- Automatic recognition of delivery devices and treatment modes, assures simple selection and safer application.

TRULASE LASER INDIRECT OPHTHALMOSCOPE (LIO)
- Unique controls of aperture size and spot position.
- Lightweight and highly portable LIO.
- Superior clarity safety filter lens for enhanced, undistorted viewing.

ENDO OCULAR PROBES
- Straight, Curved, Aspirating and Illuminating
- Available in multiple Gage options
- Standard SMA connector for convinience of multiple manufacturer choices.

WIRELESS, POWER-CONTROL FOOT PEDAL
- Wireless connection enables convenient positioning.
- Foot power control, allows for hands-free laser operation.
- Uninterrupted procedure for increased visual focus.

FIXED AND AUTOMATED SAFETY FILTER
- Motorized and fixed safety filter options available to suit vast variety of surgical microscopes.

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G.M.P. MEDICAL DEVICE

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