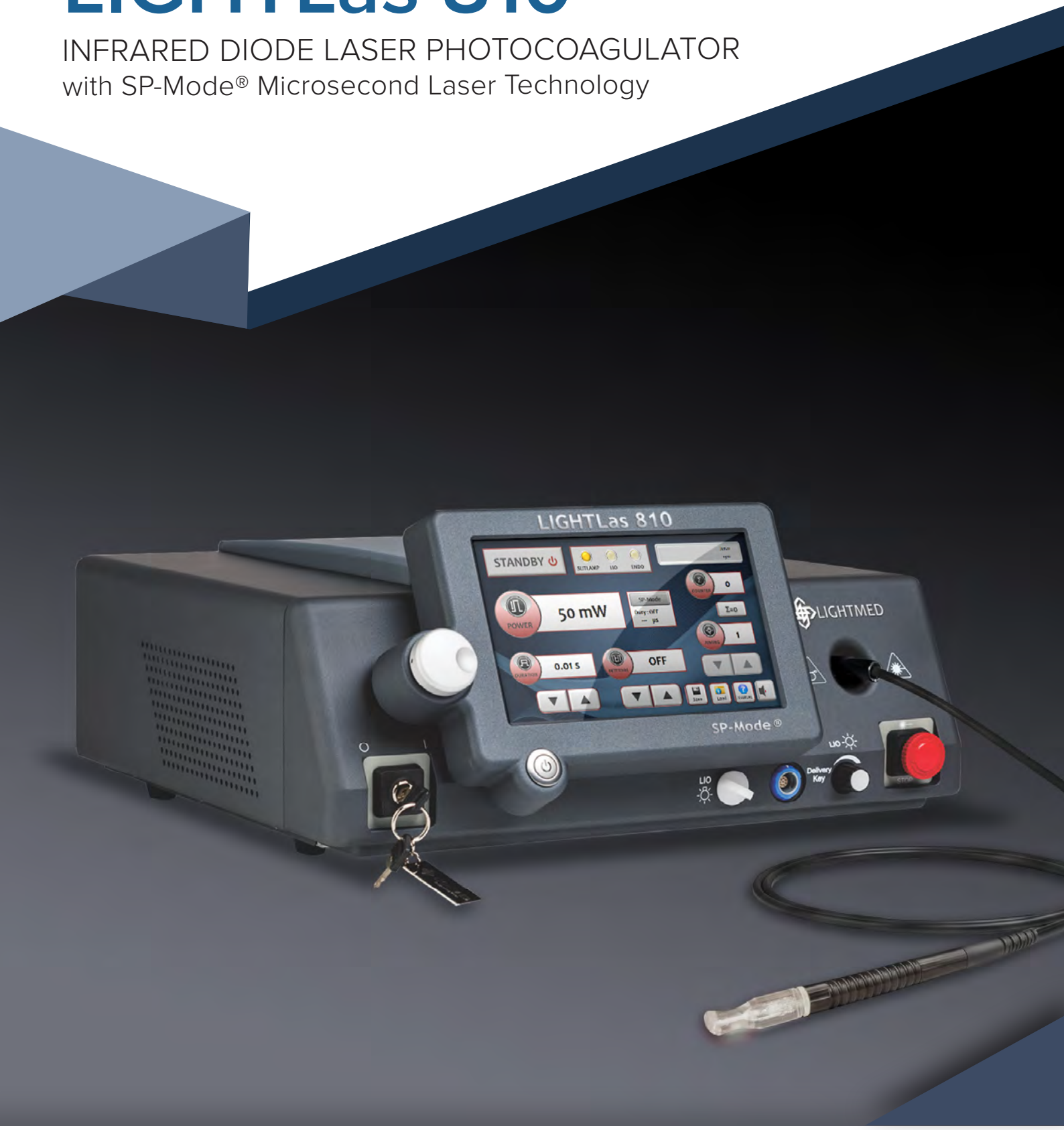
LIGHTLas 810

INFRARED DIODE LASER PHOTOCOAGULATOR
with SP-Mode® Microsecond Laser Technology



OPTIMAL WORKSTATION FOR EVERY SPECIALTY

LIGHTMED®
Enlightening Vision

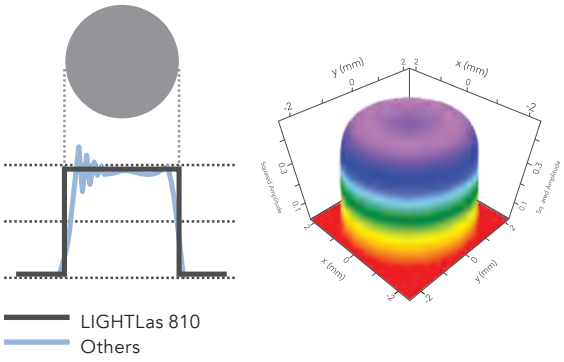
UNMATCHED DURABILITY

The LIGHTLas 810 is built with advanced technology and engineering in order to provide incomparable reliability for the most dependable laser system on the market.

Consistent Power

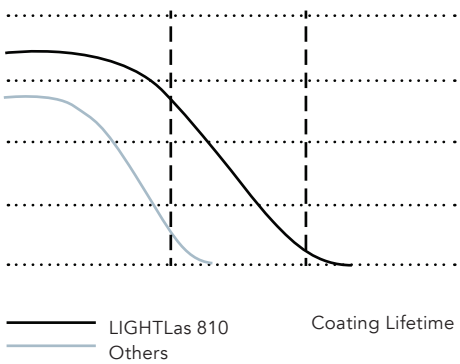
- **Laser Cavity Bonding:** The patented design with a 3.0W laser cavity assures exceptional life span and stability of the system.
- **Instant Duty-Cycle Circularity:** This feature assures stable and uniform treatment profile for maximized clinical outcomes.

Output Stability And Energy Density



- **Superior Laser Crystal Coating:** The advanced coating technology offers 30% higher damage threshold than more conventional photocoagulators. This superior coating enables advanced energy stability over prolonged use.

Laser Life Span



Confident Performance

- **Continuous System Monitoring:** LIGHTMED's innovative technology continuously measures and monitors the system to ensure optimal performance.
- **Intuitive Messaging:** Provides immediate, user-friendly notification of an issue in the rare event that the system is not performing at optimal levels.

Portable Space-Saving Design

- **Small, Sleek Design:** Compact footprint provides additional workspace and can be easily integrated into any clinic or operating room workstation.
- **Convenient and Portable:** Each LIGHTLas 810 is designed with a convenient handle and includes a portable carrying case.

Intuitive Touch Screen Technology

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

Foot Pedal With Optional 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.

OPTIMAL WORKSTATION FOR EVERY SPECIALTY

The unique properties of the 810nm infrared wavelength in traditional CW (Continuous Wave) and SP-Mode® Microsecond Laser Technology provide surgeons with a broader range of treatment modalities for various retinal and glaucoma disorders.

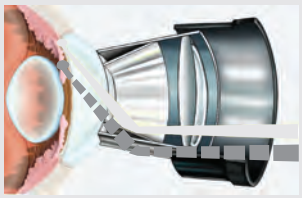
More Possibilities for Treating Glaucoma

Transscleral Cyclophotocoagulation (TSCPC) and SP-Mode® Transscleral Cyclophotocoagulation (SP-TSCPC) for patients with refractory and advanced glaucoma

- **Clinical Use:** Use with cyclophotocoagulation probe for long-term effective IOP reduction
- **Delivery Modes:** Compatible with SP-Mode® Microsecond Laser Technology or Continuous Wave delivery
- **Probe Options:** Available with and without footplate for surgeon preference

SP-Mode® Laser Trabeculoplasty (SPLT)

- Applies microsecond bursts of laser energy
- Comparable IOP-lowering effects to SLT
- No collateral damage



SP-Mode® Laser Trabeculoplasty (SPLT)

Treating ROP with the Keeler Vantage Laser Indirect Ophthalmoscope (LIO)

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

UNLIMITED POSSIBILITIES

Designed for versatility in the operating room and clinic, LIGHTLas 810 offers a comprehensive selection of combinations to address retinal and glaucoma diseases as your practice grows.

Dual and Tri Combo Laser Integration

LIGHTLas 810 works with the LIGHTLas YAG-V, LIGHTLas SLT and LIGHTLas SLT Deux-V to form a powerful and complete photocoagulator/photodisruptor/SLT workstation.

Range of Slit Lamp Delivery Adapters

Engineered with automatic recognition of delivery devices and treatment modes for simple selection and safer applications, the LIGHTLas 810 includes an extensive range of slit lamp delivery adapters (SLAs) to fit most Haag-Streit style slit lamps and LIGHTMED slit lamps.

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 µm 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

Integrated Slit Lamp with Motorized Stand

NEXT-GENERATION OPTIONS

SP-Mode® Microsecond Laser Technology along with traditional continuous wave treatment are built into the LIGHTLas 810 laser system to optimize patient outcomes.

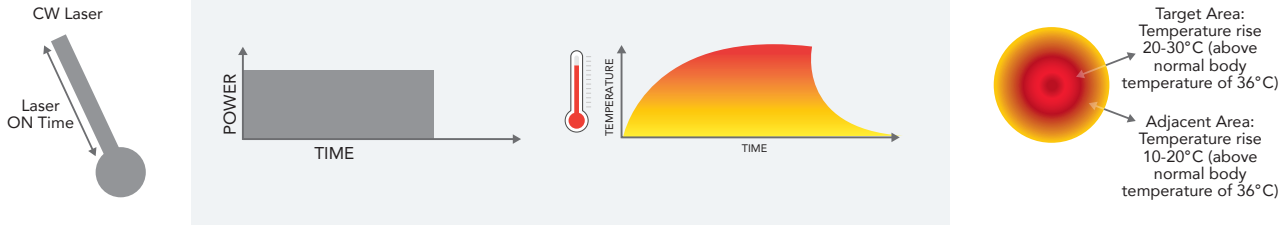
SP-Mode® Microsecond Laser Technology

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

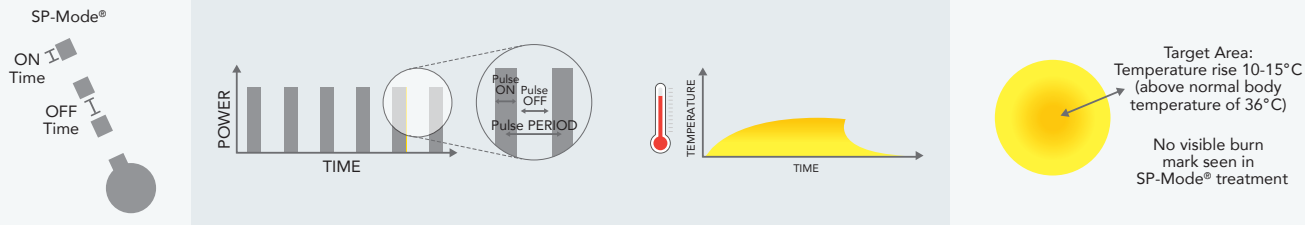
- Eliminate laser-induced thermal tissue damage and treatment side effects
- Deliver a broader range of treatment modalities
- Treat disorders at a much earlier stage

LIGHTLAS 810 - INFRARED DIODE LASER		
GLAUCOMA	• Primary Open Angle • Refractory Glaucoma	• SP-Mode® Laser Trabeculoplasty (SPLT) • Transscleral Cyclophotocoagulation (TSCPC) • SP-Mode® Transscleral Cyclophotocoagulation (SP-TSCPC)
RETINA	• Proliferative Retinopathy (Diabetic, Retinal Vein Occlusion) • Macular Edema • Barricade of Retinal Tears/Lattice Degeneration/Detachments • Sub-Retinal (Choroidal) Neovascularization • Retinopathy of Prematurity • Retinoblastoma • Malignant Choroidal Melanoma • Vascular Tumors of the Retina and Choroid	• Pan Retinal Photocoagulation (PRP) • Retinopexy • Focal Treatment • Grid Treatment • Tumor Photocoagulation • Long Pulse Thermotherapy
AMD	• Age-Related Macular Degeneration (AMD) with Choroidal Neovascularization (CNV)	• Focal Treatment • Grid Treatment

Conventional Continuous Wave (CW) Treatment



SP-Mode® Microsecond Laser Technology



LIGHTLas 810 TECHNICAL SPECIFICATIONS

Laser System	Diode Laser
Laser Safety Classification	Class 4
Wavelength	810 nm infrared
Power Output	0.05-3.0 W, continuously variable
Max Power at Cornea	3.0 W (Endo, LIO and SLA at all spot sizes)
Pulse Duration	0.01 - 10.0 s, continuously variable
Pulse Interval	Variable from 0.01-3.0 s, and continuous
SP-Mode® Settings (Sub-Threshold Laser Therapy)	**Duration:** 0.01 - 3.0, 3.5, 4.0, 4.5, 5.0, 10 - 90 s **Duty Cycle:** 5%, 7.5%, 10%, 12.5%, 15%, 20%, 25%, 30%, 31.3% **Period:** 0.01 - 3.0, 3.5, 4.0, 5.0, 10.0 s and OFF
Cooling	Auto Fan & TEC's for Laser & Crystal
Treatment Spot Size	50 - 1000 µm Integrated Version
Aiming Beam	Laser diode 635 ± 5 nm red, max. power 1.0 mW
Slit Lamp Illumination	LED XLamp® XM-L2 2.85 V 10 W
Aiming Laser Safety Classification	Class 2
Dimensions (Laser Console)	13 cm (H) x 36 cm (W) x 33 cm (D) | 5.1 in (H) x 14.2 in (W) x 13 in (D)
Weight (Laser Console)	7.8 kg | 17.2 lbs
Power Requirements	100-240 VAC (100-230 VAC where required by local registration), 50-60 Hz Auto Ranging

LASER INDIRECT OPHTHALMOSCOPE

Indirect Model	Keeler Vantage
Retinal Spot Size	1100 µm, measured at 280 mm from the front face of the LIO
Illumination Power	From laser console or stand alone power source
Fiber Length	5 m
Weight	800 g
Safety Filter	Fixed filter OD 4 @ 810 nm

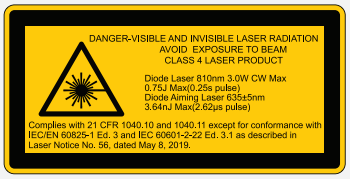
Specifications are subject to change without notice. LIGHTMED devices are made strictly in accordance with the international laser safety regulations and standards: IEC/EN 60601-1, IEC/EN 60601-1-2, IEC/EN 60601-2-22, IEC/EN 60825-1

Optional Accessories

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

FDA
U.S. 510(k) Cleared
K021538

CE 2460



** FDA and CE registered model name: LightLas 810*

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Enlightening Vision

www.lightmed.com

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