# Lumenis Pulse<sup>™</sup> 50H Holmium Laser System Technical Specifications

Average Power: 50 Watts Laser Source: Holmium:YAG Wavelength: 2.1 μm Energy per Pulse: 0.2-3.5 Joules Repetition Rate: 5-25 Hertz

**Note:** Using any third-party laser fibers not listed as compatible with Lumenis Pulse<sup>™</sup> Laser Systems and VersaPulse<sup>™</sup> PowerSuite<sup>™</sup> Laser Systems may void the customer's warranty.

\*Bench test results may not necessarily be indicative of clinical performance.

### **Risk information**

The use of the Lumenis Pulse 50H in urology is contraindicated for patients who are unable to receive endoscopic treatments or are intolerant to prolonged anesthesia, as well as for resection or excision of large, vascularized organs. Holmium lasers are intended solely for use by physicians trained in the use of the Ho:YAG ( $2.1 \mu m$ ) wavelength. Incorrect treatment settings can cause serious tissue damage. The laser should be used only on tissues that are fully observable. See the system user manual for a complete list of contraindications and risks.



LASER CLASS 4 / IV Holmium: YAG: 2.1µm, 3.5J max, 600 µs pulse max LASER CLASS 3R / IIIa



DANGER - VISIBLE AND INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION CLASS 4 LASER PRODUCT per IEC 60825-1: 2007/2014 CLASS IV LASER PRODUCT per 21 CFR 1040.10 and 1040.11 except for comformance with IEC 60825-1 Ed. 3 and IEC 60601-2-22 Ed. 3.1 as described in the Laser Notice No. 56, dated May 8, 2019

LB - 20001720

#### **References:**

- 1. Smith JA, Howards SS, Preminger GM et al. Endoscopic ureteral surgery, Chapter 7. Hinman's Atlas of Urologic Surgery. Elsevier. 2019;4:320.
- 2. Ventimiglia E, Doizi S, Kovalenko A, et al. Effect of temporal pulse shape on urinary stone phantom retropulsion rate and ablation efficiency using holmium: YAG and super-pulse thulium fibre lasers. BJU Int. 2020 Jul; 126(1):159-67.
- 3. Moore HG, Thomas D, Chughtai B. 10 Holmium Laser Ablation of the Prostate. A Comprehensive Guide to the Prostate. Academic Press. 018;67-71.
- 4. Elmansy HM, Elzayat E, Elhilali MM. Holmium laser ablation versus pho To selective vaporization of prostate less than 60 cc: long-term results of a randomized trial. J Urol. 2010 Nov;184(5):2023-8.
- 5. Kuntz RM. Current role of lasers in the treatment of benign prostatic hyperplasia (BPH). Eur Urol. 2006 Jun;49(6):961-9.

#### Boston Scientific acquired the global surgical business of Lumenis Ltd.

Lumenis Pulse<sup>™</sup> 50H is the registered product name. Lumenis Pulse<sup>™</sup> 50H Holmium Laser System is manufactured and sold by Boston Scientific. Lumenis is a registered trademark of Lumenis Be.

#### Rx only.

CAUTION: The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings, and instructions for use can be found in the product labelling supplied with each device or at www.IFU-BSCI.com. Products shown for INFORMATION purposes only and may not be approved or for sale in certain countries. This material not intended for use in France. All images are the property of Boston Scientific. All trademarks are the property of their respective owners.



Advancing science for life<sup>™</sup>

www.bostonscientific.eu

© 2022 Boston Scientific Corporation or its affiliates. All rights reserved. DINURO2502EB

URO-1278805-AB





# Lumenis Pulse<sup>™</sup> 50H Holmium Laser System

# For lithotripsy and soft tissue



The Lumenis Pulse<sup>™</sup> 50H is a mid-power holmium laser designed to address any kind of stone during lithotripsy.<sup>1</sup>



Over 130 different energy and frequency settings designed to address any type of stone and soft tissue.



Hands-free ready/standby mode designed for improved ease of use.

## **Embedded retropulsion capabilities**

The system allows physicians to quickly switch to a long-pulse mode which is designed to address retropulsion.\*2

The holmium laser penetrates prostatic tissue at 0.4mm, just enough to precisely and guickly vaporize tissue without causing deep thermal injury, deep coagulation and charring.<sup>3-5</sup>



Short pulse Long pulse

The combination of different laser parameters allows for a wide range of medical specialties, including Urology, Arthroscopy, General Surgery, ENT, Gynecology, Gastroenterology and more.

Lumenis Pulse<sup>™</sup> 50H is compatible with the SlimLine<sup>™</sup> 200 D/F/L fiber, whose ball-shaped tip is designed to reduce the risk of damaging the flexible scope during initial fiber insertion.



# Ease of use

The graphical user interface with a touch screen allows for the tracking of accumulated energy during the procedure and double settings are controlled by the systems' dual pedals.



### Customizable dual pedals

Allows for easy switching between two sets of laser settings during procedure in addition to a foot-operated ready/standby mode.

### Enhanced visibility

Green aiming beam designed for endoscopic visibility.



### Validated with range of delivery devices

SlimLine<sup>™</sup> family of fibers: Designed for durability, flexibility and versatility in urological procedures. SlimLine<sup>™</sup> 200 D/F/L, Single-Use Fiber, with ball tip: Designed for flexible ureteroscopy procedures.