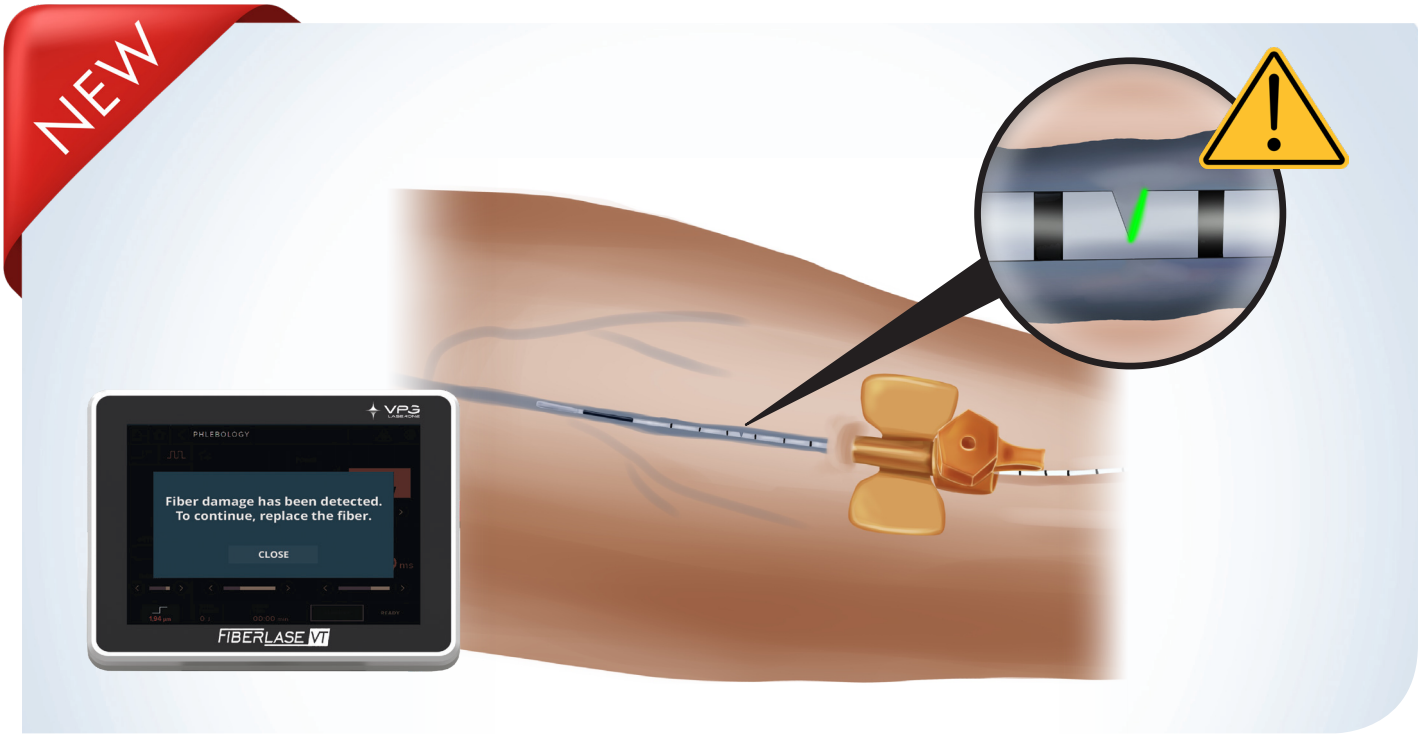
# FiberLase VT

Laser device with a wavelength of 1,94 мкм

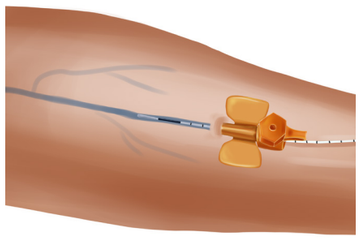
## Applications

- Phlebology
- Proctology

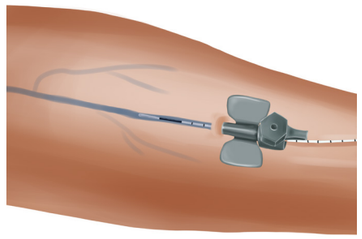

FiberDamage Sensor is a unique feature of the VTLase that enhances EVLT safety. When activated, it automatically monitors the integrity of the radial fiber during the procedure and instantly halts laser emission if damage is detected, preventing harm to surrounding tissues.



## Surgical fiber radial is available in two variants:



"Surgical Fiber" R550 core diameter 550 µm, used with a 14 G catheter



"Surgical Fiber" R365 core diameter 365 µm, used with a 16 G catheter

## Advantages of 1.94 µm in EVLT

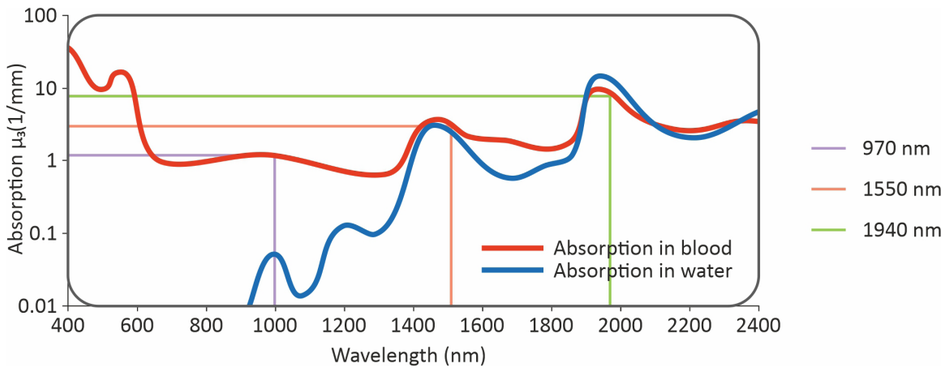
Compared to 1.47 µm, results in a reduction in the duration of postoperative pain and the use of pain medication[1].

- Effective coagulation of trunks of great saphenous veins at lower energy parameters in comparison with devices at a wavelength of 1.47/1.55 µm.
- Working at low energy parameters reduces the probability of failure of the fiber , and increases its resource in order to use it on several veins in one go.
- The possibility of performing EVLT in superficially located veins and varicose veins due to the absence of overheating of adjacent tissues due to the small depth of radiation penetration of 1.94 microns into the tissue.

## Advantages of 1.94 µm in proctology

- Operations on an outpatient basis
- Reducing the risk of bleeding both during surgery and in the postoperative period
- Decreased level and duration of pain
- The speed of the operation
- Reducing the period of disability

Graph of the dependence of the radiation absorption coefficient on the wavelength[2]. Due to the high absorption of 1.94 µm radiation in water, the processes of heat transfer and convection during EVLT at lower energies occur more efficiently.




[1] Mendes-Pinto, D., Bastianetto, P., Cavalcanti Braga Lyra, L., Kikuchi, R., & Kabnick, L. (2016). Endovenous laser ablation of the great saphenous vein comparing 1920-nm and 1470-nm diode laser. International angiology : a journal of the International Union of Angiology, 35(6), 599–604.
[2] Roggan A., Bindig U., Wäsche W., & Zgoda F. (2003). Action mechanisms of laser radiation in biological tissues, Applied Laser Medicine. Ch. I-3.1. Pg. 87.

## Intuitive interface

The intuitive interface allows easy to navigate in all sections of the menu. The large touch screen makes it possible quickly and comfortably adjust parameters laser radiation, as well as brightness pilot beam.

The "Save procedure" option allows memorize the parameters of laser radiation for fast loading of the required mode of operation. Automatic counter for energy and time informs user about the particular amount of energy transferred to the patient as well as about time used for the procedure.


«PHLEBOLOGY» MODE
The user is offered a recommended fiber extraction speed depending on laser parameters which are used.


«EXPERT» MODE
The user can choose continuous or pulse mode of operation, set the parameters of power, pulse duration and pause.

Radial Tip fiber is used in phlebology to perform EVLT.

Bare Tip fiber is used for tissue dissection, vaporization and coagulation during open, endoscopic and laparoscopic surgeries.

Cone Tip fiber is used in proctology for minimally invasive hemorrhoid treatment.

## Specifications

| | |
|---|---|
| Wavelength, µm | 1,94 |
| Max power, w | 10 |
| Mode | Continuous, pulsed |
| Pulse duration, ms | 2 ... 1000 |
| Screen type | Touch |
| Fiber diameter, µm | 365 ... 550 |
| Dimensions (h x w x l), mm | 253 × 310 × 419 |
| Weight, kg | 10 |

# WORLD LEADER
## IN THE LASER INDUSTRY

VPG LaserOne LLC (formerly IRE-Polus LLC) is a Russian company established by an outstanding Soviet scientist, Valentin Pavlovich Gapontsev, the founder of the international scientific and technical IPG Photonics Corporation.

VPG LaserOne is a globally recognized leader in the field of fiber lasers and amplifiers, as well as devices and systems based on them. Drawing on deep expertise and decades of experience in laser equipment production, VPG LaserOne LLC designs and supplies medical laser devices and surgical fiber for a wide range of applications.

VPG LaserOne develops advanced medical laser devices through a full-cycle process that includes device engineering, development of clinical application protocols, in-vitro research in its proprietary laboratory and clinical trials conducted in collaboration with leading clinical centers.

VPG LASERONE LLC
www.vpgmeds.com

+971 50 764 2603
sales@vpglaser.com

**DATE OF ESTABLISHMENT**
**1992**

**15**
**CLINICAL CENTERS FOR IN-VITRO AND IN-VIVO STUDIES**

**>1 million**
**PATIENTS TREATED WITH VPG LASERS IN 2024**

**>2000**
**MEDICAL LASER SYSTEMS INSTALLED WORLDWIDE SINCE 2017**