

DIOLAS

LFD 3000

LFD Laser for the
Interdisciplinary Laser Therapy

Company Profile

Limmer Laser GmbH is a German company, specialising in the design, manufacture and sale of medical lasers and accessories. Our products cover all the major disciplines of human, dental and veterinary medicine. For each discipline a broad range of high quality accessories is available, such as the VACULAS smoke evacuator. The product range includes CO₂ Lasers, Diode Lasers and Specialty Lasers.

Instead of simply focusing on separate devices, our philosophy is to create multipurpose, integrated and highly functional work stations. Working with our many loyal customers all over the world, and our established network of suppliers and distributors, we will continue to provide innovative solutions for modern medicine far into the future.

We have a strong emphasis on research and development, production, service and training. Working in conjunction with hospitals and physicians is just as important as good communication. Product quality is our No. 1 priority: Our company is certified to the stringent European Quality Standard EN ISO 13485:2003.



Limmer Laser GmbH
Schwarzschildstr. 1 • D-12489 Berlin • Germany
Tel. +49 (0)30 - 6392 5570 • Fax +49 (0)30 - 6392 5580
info@limmerlaser.de • www.limmerlaser.de



DIOLAS LFD 3000

Specialised Laser Technology for a Broad Range of Interdisciplinary Applications in Medicine

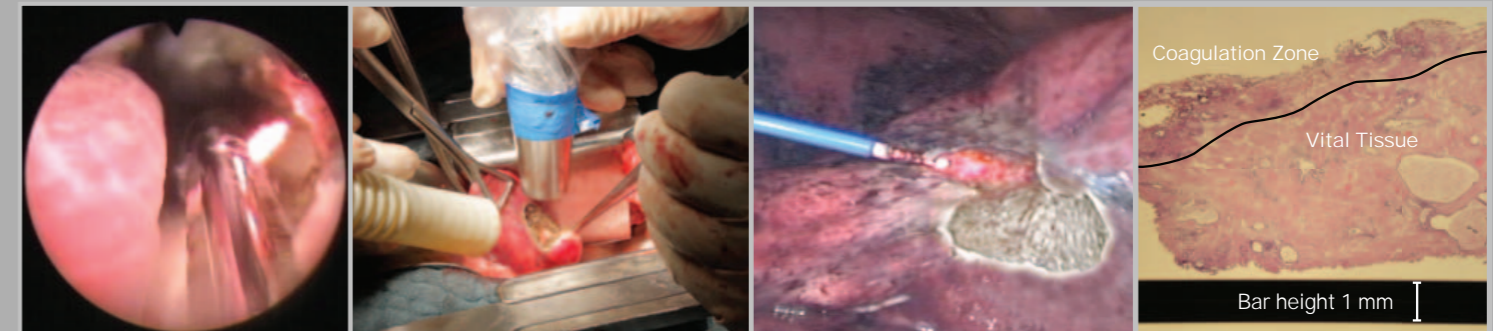
For the first time it has been possible to combine a powerful, clinically proven laser for the effective treatment of **Parenchyma Tissue** with the **Destruction of Stones** (Lithotripsy). The innovative LFD Technology and a special wavelength of 1.500 nm effectively avoid bleeding, while surrounding structures remain unaffected.

Clinical studies have shown that the LFD treatment mode results in an optimal coagulation zone of about 1 mm in soft tissue. The physician can efficiently and simultaneously, vapourise and coagulate the tissue. This allows the use of the LFD treatment for high-risk patients.

With the option of choosing from a range of different handpieces and fibers, the device can be used for both open and minimally invasive surgery (e.g. laparoscopic nephrectomy) in a broad range of disciplines.

Unique "LFD" Treatment Mode

LFD stands for Levelled Field Density and describes a unique operating mode which enables maximum vaporisation, with a controlled penetration depth, during treatment of soft tissue.

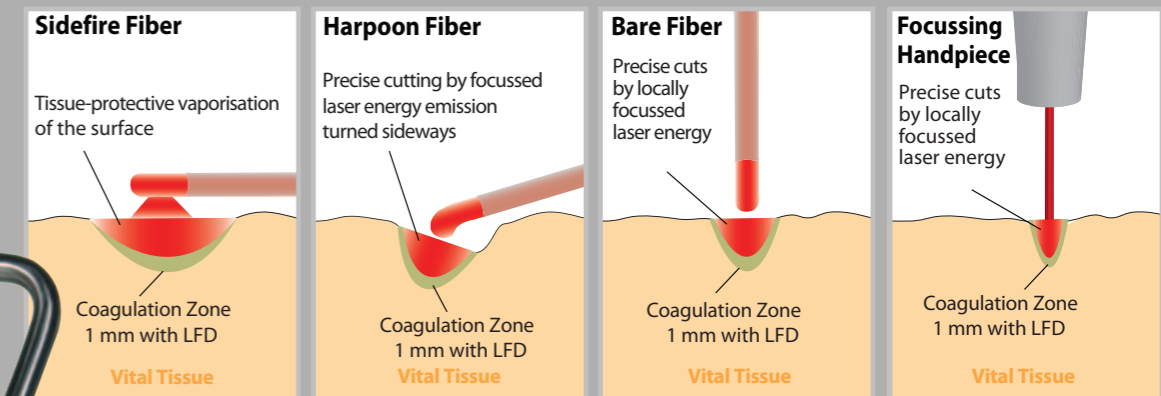


Application examples: Minimally invasive treatment of Benign Prostatic Hyperplasia (BPH) by vaporisation or enucleation, as well as the open or laparoscopic resection of tissue (e.g. nephrectomy)

Histological analysis



During treatment, a range of different handpieces and fibers for both minimally invasive as well as open surgery is available for the application of laser energy.



The applicators can be used either for ablation or precise cuts and are designed for specific indications.

Advantages of the LFD Laser Therapy at a glance

- **Highly reduced collateral damages**
The reduced coagulation zone (penetration depth) of 1 mm avoids collateral damage to surrounding structures or organs
- **Efficient therapy**
Due to the constantly high absorption of the laser energy
- **No bleeding**
The tight coagulation zone restricts potential bleeding and other follow-up complications, even with high-risk patients
- **Safe to use**
The eye-safe laser light allows the use of transparent protection goggles and guarantees a clear perception of the operating environment
- **Highly versatile, enabled for cross-disciplinary uses**
For example in vascular, liver, spleen or kidney surgery, ENT, gastroenterology, gynaecology, urology or orthopaedy

More options with just one single device

- One easy-to-use device for a whole range of treatments
- No repeated learning of different user interfaces necessary
- Much lower short and long time costs by re-usable fibres and high product quality
- Shorter stays in the hospital by a much lower risk of complications; enabled for daytime surgery
- Much lower maintenance costs as e.g. with green lasers
- No special requirements - the laser device works without high voltage at 230 V / 110 V and without external cooling
- Low noise level throughout the entire treatment
- An extensive range of accessories such as smoke evacuator VACULAS can be connected directly to the laser
- Product engineered and produced in Germany according to quality standard EN ISO 13485:2003+AC:2009

Accessories such as smoke evacuator VACULAS 2005 can be optionally controlled by the laser device

