


TECHNICAL FEATURES

Wavelength (nm)	980 (available 915,940)
Laser	High Power Diode (GaAs)
Power	15 - 30 - 60 Watt
Preselected programmes	Advanced software with experienced protocols to be manually customized by operator
Pulse duration (Ton - Toff)	Adjustable from 1 to 9000 msec - steps 1 ms
Number of pulses per sequence (single and pulsed mode)	Adjustable from 1 to 100 - steps one
Interval between pulse sequence (pulsed mode)	Adjustable 10 ms ÷ 10 sec
Operation mode	Single pulse mode Pulsed mode Continuous mode
Numerical aperture	0,22
Cooling system	Air cooling system combined with Peltier's Cells
Aiming beam	Red - 635 nm - 5 mw (MAX)
Electrical power	125-220 VAC 50/60 Hz
Absorbed power	300 VA peak (adapted to domestic electric standard)
In compliance with	ISO 9001 ISO 13485 93/42/CEE CEI EN 60601-1 CEI EN 60601-2-22 CEI EN 60601-1-4 CEI EN 60825-1 CEI EN 60601-1-2 
Weight and dimensions	13 kg - 35 x 34 x 13 cm



EUFOTON[®]
M E D I C A L A S E R S

via Flavia 23/1 - 34148 Trieste (Italy)
Ph. +39 040 9899082 - Fax +39 040 9890555
www.eufoton.com - info@eufoton.com

ISO
9001
QUALITY
ASSURANCE

ISO
13485
QUALITY
ASSURANCE

Our facilities has been Registered to the International organization for Standardization ISO 9000 Series Standards for Quality.

Before and After photographs used in this brochure are courtesy of L. Corcos MD, O. Marangoni MD, G. P. Tassi MD.

distributor space

penlab.it

EUFOTON[®]
M E D I C A L A S E R S

1000



LASE^{Ma}R 1000TM

VERSATILE LASER
FOR THE SURGICAL
THEATRE.

LASE^{Ma}R 1000TM for an in-depth use, is the ideal laser for wide-ranging selective surgery and high power medical therapy.

ENT
GENERAL SURGERY
GYNAECOLOGY
OPHTHALMOLOGY
VASCULAR SURGERY
PLDD
MEDICAL THERAPY

FOR AN IN-DEPTH USE

LASEmaR 1000™ is the ideal laser for wide-ranging selective surgery and high power medical therapy.

Its wavelength (980 nm) has a double advantage in surgery:

- A high water absorption power (10 times higher than an 808 nm laser and 4 times higher than a 1064 nm laser) for an enhanced penetration and vaporization of soft tissues (mainly constitutes by water).
- A high haemoglobin absorption, to achieve burn-free coagulation and excellent haemostasis.

LASEmaR 1000™ incorporate optical fiber of different core diameter (between 100 and 1000 µm), usable with the majority of endoscopes.

These features make **LASEmaR 1000™** ideal for minimally invasive procedures with quicker healing and more aesthetic and functional cicatrisation.

LASEmaR 1000™ is portable, easy to use, does not need any maintenance and is free from consumption costs.

INSTRUMENTAL ADVANTAGES

INTUITIVE MEMORY All treatment protocols are preloaded into the computer software.

SAFETY ACOUSTIC SIGNALS This software allows for the control of execution flow or of energy target; alerting the operator on reaching this requirement via audio feedback and supplying information of dosages achieved without the necessity for the operator having to divert attention from the surgical field.

ENERGY METER/SENSOR This system allows for the control of power output via the optic fibres.

PATIENT MANAGEMENT This new software can be predisposed for the creation of a database for recording patients; their data and treatment effectuated in chronological sequence. The database is readily accessed to be updated, printed out or deleted.

SELF-DIAGNOSIS SYSTEM The main circuits are continuously being monitored via a security system that warns the operator of any anomalies and automatically interrupts laser emission whenever it is deemed necessary.

APPLICATIONS

GENERAL SURGERY

LASEmaR 1000™ can selectively coagulate tissues at microscopic level, leaving the treated area sterile and bloodless, thus reducing post-op inflammation and regular pain, associated with surgical procedures. If the laser operates in pulsed emission mode, it is able to vaporize superficial lesions without any anaesthesia or stitching.

FIELDS OF APPLICATION

LASEmaR 1000™ is indicated for surgical applications requiring the vaporization, incision, excision, ablation, cutting, haemostasis and coagulation of soft tissue in conjunction with endoscopic equipments for medical specialists including: Urology, Thoracic Surgery, Plastic Surgery and Dermatology, Aesthetics, General Surgery, Ophthalmology, Orthopaedics, Podiatry, Arthroscopy, Spinal Surgery, Gynaecology, Pulmonary Surgery, Neurosurgery, Gastroenterology and Radiology, Endovascular coagulation, Oral Surgery, Dental procedures and Laser Assisted Lipolysis.

GENERAL SURGERY



OCULOPLASTIC SURGERY (DCR) AND RELATED SPECIALTIES

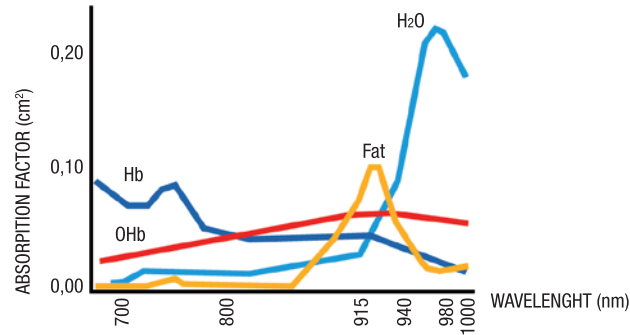
This laser is indicated for Dacryocystorhinostomy (DCR), it enables surgeons to perform minimally invasive procedures in as little as 10 minutes. Patients tolerate the procedure very well and are usually able to return to all normal activities the next day.

ENT

LASEmaR 1000™ in otorhinolaryngoiatric field assures an excellent vaporization and a cut/clot of very high precision. Laser beam on the surgical field is transmitted in two ways depending on the type of application:

- By avoiding any contact, with photothermolytic selectivity on the hyperchromic tissues preserving the surrounding healthy tissues.
- In contact, through optic fibers, flexible and of a size between 100 and 1000 micron. This feature enables also its endoscopic use, irrespective of the type of endoscope employed.

HAEMOSTASIS IN ENT



Advantages

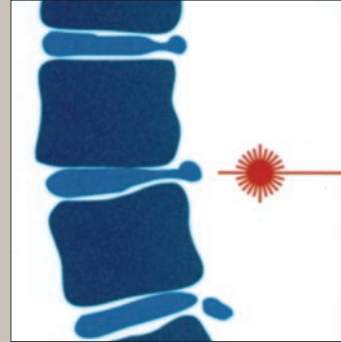
- Mini-invasive surgery precision.
- Vaporisation of tissue with minimal carbonisation.
- Visible and tactile feedback from the optical fiber.
- High haemostasis enabling optimal visualisation of the operating field.

PERCUTANEOUS LASER DISC DECOMPRESSION (PLDD)

PLDD is a conservative, minimally invasive surgical procedure approved by FDA which uses **LASEmaR 1000™** laser energy to absorb the water contained in the herniated nucleolus pulposus.

This reduces the pressure within a herniated disc (lumbar and cervical disc), relieving symptoms by decompressing the spinal nerve.

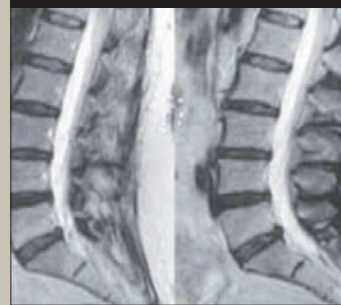
LASEmaR 1000™ increases the focused heat and reduce laser scattering.



MRI OF A PATIENT WITH L4 - L5 EXTRUDED HERNIA BEFORE PLDD



MRI OF THE SAME PATIENT 6 MONTH AFTER PLDD PROCEDURE



VASCULAR SURGERY

The **LASEmaR 1000™** wavelength by water and the high capacity of coagulation as well as the consequent parietal rhytidosis make **LASEmaR 1000™** a perfect tool for the procedures of photocoarctation of varices with thick and hypertrophic wall.

ENDOVASCULAR SAPHENOUS TREATMENT



HIGH POWER MEDICAL THERAPY

Patients suffering from post-traumatic pains or general phlogosis have an almost immediate positive reaction from the use of infrared laser with high emission power.

The beneficial effects are several: anti-inflammatory, analgesic, regenerative of connective tissue, biostimulant of lymphstream and of the phagocytosis. It is also possible to treat easily (just selecting the correspondent program) different indications: sores, ulcers, haematomas, contractures, distortions, osteoarthritis, epicondylitis and tendonitis).

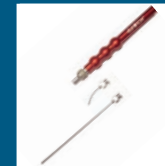
ACCESSORIES



SCANNemaR™
Rotating scanner with electronically-controlled ellipsoid movement.



VARIABLE FOCUS HANDPIECE
For contactless applications.
Spot size from 0,2 mm to 2 mm.



SURGICAL HANDPIECE
For contact applications in combination with optical fibers.



ENT CANNULAS DIFFERENT LENGTHS, RIGID AND MALLEABLE
With suction capabilities.



FTF (FIBER TO FIBER)
FTF (Fiber to Fiber): low cost disposable fibers to perform subcutaneous laser treatments



OPTICAL FIBERS
Different calibres (from 100 to 1000 micron), lengths and tips (radial, ball, sphere, conic, flat) are available.
1) sterile for single use and
2) not sterile for multiple use.



MEDICAL THERAPY HANDPIECE
For all therapeutic applications.



PLDD KIT
Optical fiber 300 micron - specific PLDD tip, Fiber locker, spinal needle.



ENDOVENOUS THERAPY KIT
With various lengths (needle introduction, guide wire insertion, placement catheter with calibration marking through cannula equipped with hemostasis valve, laser fiber lock).

LATERAL EPICONDYLITIS

