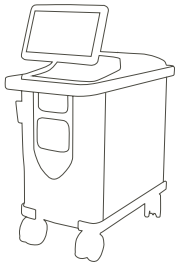
LipoAI

Artificial Intelligence-based Technology

Boosting Laserlipolysis and Laser-Assisted Liposuction to the Next Stage



LIPO AI stands out in **Plastic Surgery**, **Aesthetics** and **Dermatology**

DEKA
Innate Ability

LIPO AI

EVOLVING EXCELLENCE

LASERLIPOLYSIS

LASER-ASSISTED LIPOSUCTION

AXILLARY BROMHIDROSIS

PSEUDOGYNECOMASTIA

LIPOMA

FILLER GRANULOMAS REMOVAL

Key Principles

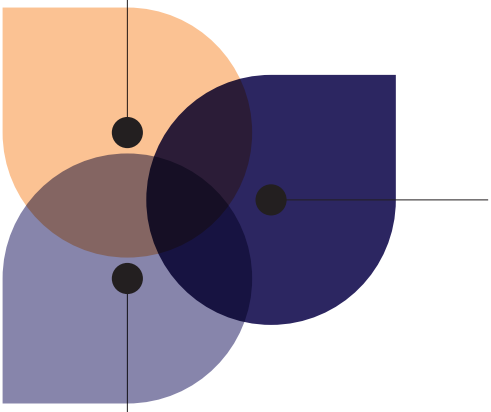
Lipo AI is the latest innovation by DEKA for the Laserlipolysis and Laser-Assisted Liposuction markets. Following the great success of SmartLipo, which has become a gold standard worldwide, DEKA's Research and Development has optimized numerous technical and practical characteristics, developing a second-to-none device, based on predictive and control algorithms based on Artificial Intelligence.

Lipo AI is a medical laser equipped with a short pulse NIR laser source.
The device delivers laser energy through a special optical fiber. The fiber is inserted through a narrow stainless-steel cannula into any patient's body.

Why Choosing Lipo AI:

New Flexible Up-to-Date Short Pulse

Thanks to the shortest possible pulse duration, the induced photo-acoustic effect is very effective, and procedures are nowadays 30% faster when compared to the operation time of the traditional laserlipolysis.



Exclusive Handpiece Technology (Fiber Protecting Option)

Fiber insertion into the cutis is adjusted by a device which protects it from the risks of damage and facilitates insertion.

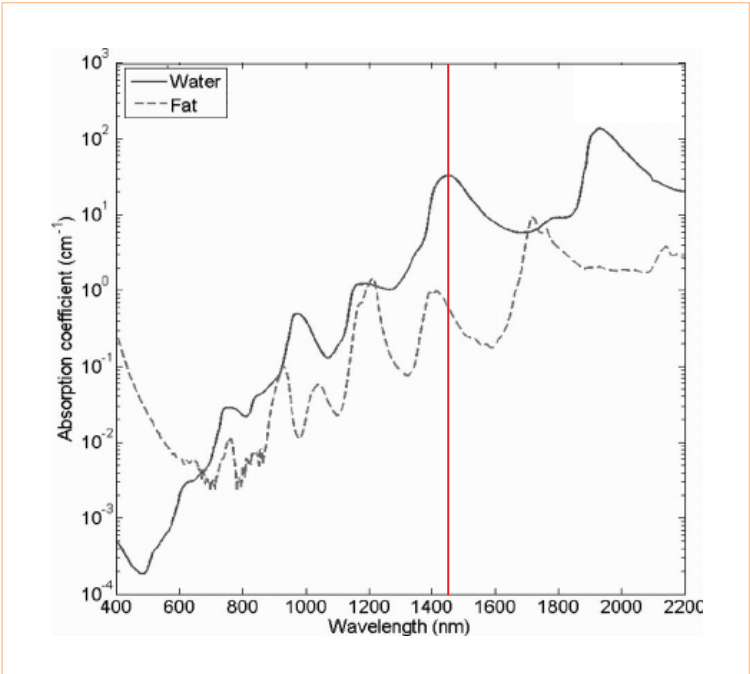
Safety Comes First

Thanks to exclusive Artificial Intelligence algorithms, a high-precision accelerometer mounted on the handpiece allows the operator to adjust the emitted energy based on the operator's speed and movement, as well as on the doses already given by area. Moreover, a particular temperature sensor (Thermal Guide) detects the temperature in the treatment area, managing the correct delivery of the energy.

THE SCIENCE BEHIND

1444 nm - The Ideal Wavelength for Fat Absorption

The 1444 nm wavelength has high selectivity characteristics and it is highly absorbed by the fat. For this reason, it represents the most effective wavelength for Laserlipolysis and Laser-Assisted Liposuction. In addition, this particular wavelength, being largely absorbed also by water, minimizes the risk of carbonization and damage to surrounding tissues.



Piccolo D/Bonan P et al. (2024). "1444-nm Nd:YAG for Laser-Assisted Lipolysis: A Minimally Invasive Technique for the Treatment of Pseudogynecomastia". Eplasty , 24, pp: e17

Laserlipolysis: DEKA's Innovation that Has Revolutionised Liposculpture

The high-peak power emitted, together with DEKA's exclusive Gradient Pulse Technology (GPT), breaks the membranes of the adipocytes facilitating the discharge of the cell content, while minimizing thermal effects on the surrounding tissues.
Laserlipolysis is also indicated for treating localized fat deposits in specific body zones and is extremely effective in areas where diet and physical exercise fail to deliver positive results.

Laser-Assisted Liposuction

The photomechanical action of the laser is assisted by low-pressure aspiration through a special microcannula. The fat is removed immediately without any trauma or lesion. This procedure is particularly indicated when removing larger volumes in patients who want faster results.

INNATE ABILITY

Clinical Results

THE SCIENCE BEHIND

Artificial Intelligence-based Technology

A new handpiece supplied with an Innovative algorithm accelerometer manages the energy delivery to the patient for max safety, efficacy and comfort.
Furthermore, the thermal guide sensor, mounted on the cannula, measures the obtained internal temperature, and prevents going beyond the optimal temperature for lysis. Thanks to these exclusive devices, laserlipolysis with lipo ai is more effective and safer compared to traditional laserlipolysis.

Safety Clip Blockage

To ensure the fiber does not slide out during the use.

Accelerometer

An exclusive embedded AI-based accelerometer ensures that precise laser power is delivered to prevent overheating of the tissue.

Fiber-Protecting Option

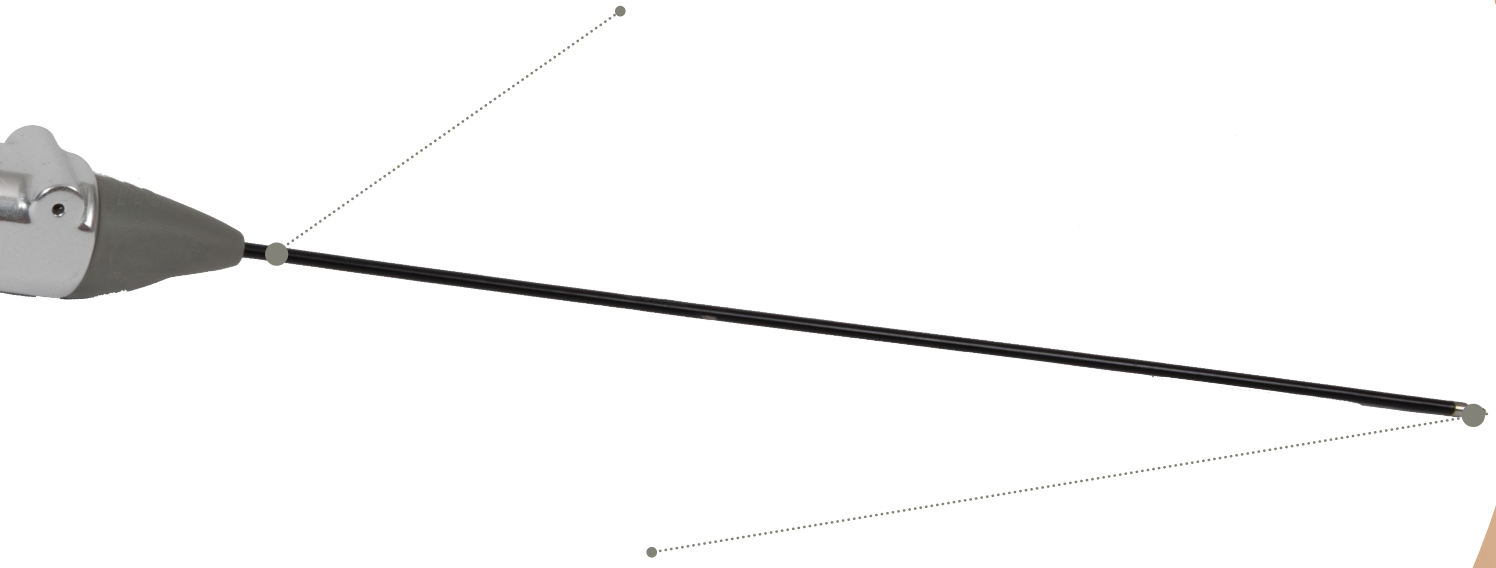
Fiber insertion is protected by a fiber-protecting option which is activated by changing the clamp position.

PLUS Handpiece

The Lipo AI system is equipped with the PLUS handpiece, capable of delivering a pulsed air massage (positive pressure) on the treated area. The PLUS handpiece allows to perform a draining massage in accordance with a simple and standardized procedure. The air flow emitted by the handpiece allows for the reactivation of cutaneous microcirculation.

Thermal Guide

The cannula with the thermal guide sensor has been designed to detect sub-dermal temperature during the treatment. The sensor detects when the pre-set temperature limit has been reached, the laser energy delivery is interrupted until the temperature scales back under the threshold limit.



Double Aiming Beam

Lipo AI is equipped with two aiming beams. The operator visually detects when the laser is correctly scanned into the patient body, while the beam changes color when the handpiece movement is stopped.
(Red Light: no energy delivery | Green Light: correct energy delivery).

Main System Description

LIPO AI	
Wavelength	1444 nm
Power (max)	12 W
Laser Delivery Facility	Special handpiece with optical fibers
AI	Artificial Intelligence Alghoritms
PLUS Handpiece	Rythmic Body Massage (RBM) at selectable frequences
Dimension	45(W) x 115 (H) x 98 (D)
Weight	Approx 100 kg

DANGER - Visible and invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation. Class 4 laser product.

This brochure is not intended for the US market.

CE 0123

Lipo AI

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Dealer stamp

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DEKA, a spin-off of the El.En. group, is a leading company in the design and production of lasers and light systems for medical applications. DEKA markets its equipment in more than 80 countries through a network of distributors in international markets and direct branches in France, Japan, and the USA. DEKA manufactures laser devices in compliance with Medical Device Regulation 2017/745/EU and its Quality Management System certified according to with ISO 9001 and ISO 13485 standards.