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# iLux **smart**

## WHAT IS ILUX SMART?

#### THE PERFECT COMPROMISE BETWEEN PERFORMANCE AND FUNCTIONALITY

iLUX SMART is a cutting-edge device for laser therapy and the result of over 40 years of experience in the design of medical laser systems. **iLUX SMART** is light, compact and easy to use: these features, combined with its performance make it the perfect partner for any therapist who needs an intuitive and reliable device by his side in everyday work.

**iLUX SMART** is safe, non-invasive, painless, effective and allows customizing the therapy in order to treat numerous pathologies.









**EASY AND INTUITIVE COMPACT, LIGHT AND EASY TO TRANSPORT** USE

**FULL CONTROL** VIA TOUCH SCREEN



**FOR A TARGETED** 

TREATMENT





DIFFERENT APPLICATORS EMISSIONS IN **ONE LASER** 

**PROTOCOLS FOR EFFECTS AND PATHOLOGY** 

LIGHT AND COMPACT



Mectronic's SMART line includes a new range of compact, portable and easy to use products, able to offer an effective therapy for every need.

The **SMART line** is the ideal solution for the therapist who is looking for a small device, without making compromises in terms of excellent performance and ease of use that characterizes Mectronic devices.



#### SIMPLE AND INTUITIVE

**SMART** is the keyword of this product line signed by Mectronic: each device is designed to be easy to use, featuring a highly intuitive user interface.

**iLux Smart** is "plug and play": after turning on the device it is already possible to operate and treat with only a couple of simple operations. Moreover **iLux Smart** offers a large number of customization options, allowing the operator to optimize the therapy by maximizing the therapeutic effects.

## THE CONTROL IS IN YOUR HANDS



Thanks to its 7" IPS touchscreen, the MecOS 5.0 operating system guides the operator through the management of the therapy in a simple and intuitive way guaranteeing practical results from the very first use.

The user interface is designed to be easy to use and browse, allowing the operator to set up the therapy straight away.

The technology used in **iLux SMART** guarantees power and accuracy, as well as an effective treatment for all therapeutic needs.



## VERSATILITY AND EFFICIENCY

**iLux SMART** features a comfortable and compact handpiece without compromising the versatility necessary for effective therapy.



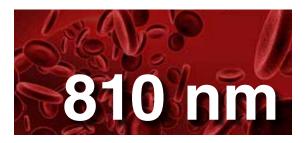
#### **MAGNETIC ATTACHMENT**

The control of the therapy is strictly connected to the handpiece and applicators. For this reason Mectronic has redesigned the ergonomics and functionality of the handpiece by providing a patented magnetic attachment, allowing the operator to quickly change the applicator for a simpler and more effective therapy.

### 4 WAVELENGTHS AVAILABLE

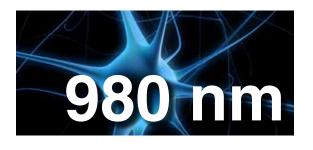
The **four available wavelengths**, **650 nm**, **810 nm**, **980 nm and 1064 nm**, have different characteristics, particularly in their specific interaction with chromophores:



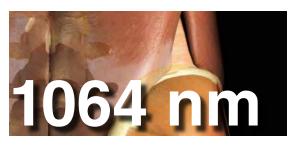


The photobiomodulation mechanism can be triggered thanks to the high absorption coefficient of Cytochrome C Oxidase towards this wavelength. It guarantees considerable energy exchange on the surface and medium depth level and inhibits bacterial proliferation. It allows obtaining excellent results in healing injuries, sores and ulcers.

The photobiomodulation mechanism can be triggered thanks to the high absorption coefficient of Cytochrome C Oxidase towards this wavelength. It allows rapid enabling of the hemoglobin oxidation process: it facilitates their regeneration by transferring the right energy supply to muscles and tendons.

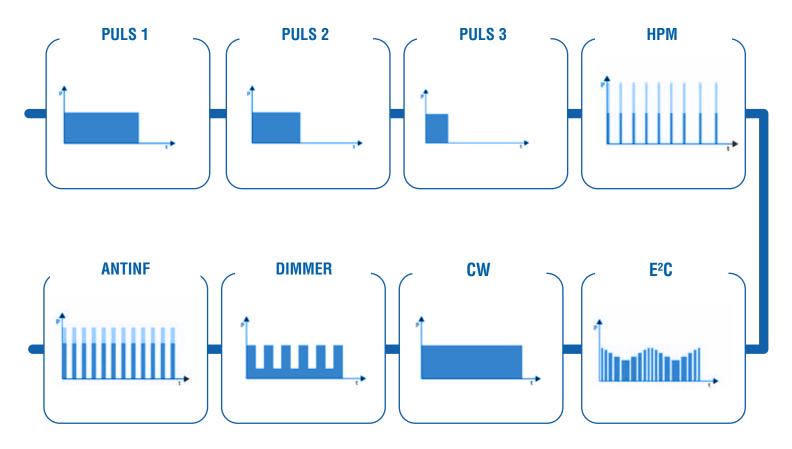


Mainly absorbed by water, it allows optimizing the action on thermoreceptors and mechanoreceptors. If combined with the  $E^2C$  mode, it ensures the right interaction with the peripheral nervous system, enabling the Gate Control mechanism for rapid analgesic effect.



THIS IS the wavelength with the least dispersion inside biological tissues. Its high directionality allows conveying the correct dose of energy to the noxa. The result is a perfect synergy that balances the rapid analgesic effect, the inflammatory processes control and the activation of the metabolic processes triggered by photobiomodulation.

### **10 EMISSIONS IN ONE LASER**



Therapeutic lasers represent an important resource for physiotherapy and their efficacy on tissues becomes an essential requirement when choosing among the various devices available on the market. The operator must be able to treat both chronic and acute problems, guaranteeing the best possible results.

This is why Mectronic has implemented a wide range of emission modes in a single laser, increasing its effectiveness.

#### PATHOLOGY LIBRARY

The pathology library includes numerous pathologies with related interactive protocols. The software also provides immediate graphic feedback, which displays the power, time and actual energy delivered by the device.

#### **TREATMENT GUIDE**

The pathology library includes a protocol dedicated to each pathology, both acute and chronic. The images clearly show how to treat the patient.

#### TREATMENT MANAGEMENT



## A PROTOCOL FOR EVERY NEED

To further customize the therapy, **iLux SMART** has different types of pre-set protocols that allow every therapist to find the right solution for his need.



#### TIME MODE

The Time mode allows the therapist to set a specific time mode during which the therapy can be performed. The therapy stops automatically when the set value is reached.

#### PATHOLOGY PROTOCOLS



**iLux SMART** offers a complete pathology library with over 80 therapeutic protocols to treat the most common problems. The software also offers the safety of instant visual feedback displaying power, delivery mode, therapy time and treatment area.



Joule mode allows the therapist to set the determined amount of energy necessary for the treatment. The therapy stops automatically when the set value is reached.

#### **PROTOCOLS FOR EFFECTS**



iLux SMART allows the operator to work in order to obtain specific effects: biostimulant, anti-inflammatory, anti-edema, analgesic and contracture-relieving.

## SCANX MODE (OPTIONAL)



#### TIME OPTIMIZATION

**JOULE mode** 

Thanks to the patented magnetic conical attachments, **iLux SMART can be easily used as an independent operator laser**, changing modes with a simple control. The innovative and practical safety button also allows the patient to interrupt therapy at any time during treatment. Flexibility, practicality and high therapeutic performance: **iLux SMART is the ideal partner for optimizing everyday work**.

#### **ACCESSORIES**





ScanX automatic mode software update for iLux SMART



## **TECHNICAL SPECIFICATIONS**

	Mectronic's own MecOS 5.0
SOFTWARE	Real-Time Operating System
WAVELENGTH	- 650 nm - 810 nm - 980 nm - 1064 nm
GUIDE LIGHT	650 nm - up to 3 mW
LASER POWER	Up to 15 W
ISSUE	- Continuous (CW) - E <sup>2</sup> C (patented stochastic mode) - Antinf - Puls1, Puls2, Puls3 - Dimmer - HPM
SPECIAL MODES	- Joule - Timer - Trigger Point
EFFECT MODES	Protocols to maximize the main effects: - Biostimulant - Analgesic - Anti-inflammatory - Anti-edema - Contracture-relieving
mode Automatic mode	ScanX automatic mode (Optional)
PROTOCOLS	Over 80 preset protocols
CALIBRATION	Display and acoustic control system for laser emission at handpiece exit according to IEC EN 60825-1
DISPLAY	7" TFT IPS color display
	with capacitive touch screen
POWER SUPPLY	100÷240V 50÷60Hz
ABSORPTION	160 VA
ABSORPTION	
	160 VA - CASE: 295 x 265 x 147 mm
DIMENSIONS	160 VA - CASE: 295 x 265 x 147 mm - WITH TROLLEY: 516 x 516 x 1015 mm - CASE: 4 Kg
DIMENSIONS	160 VA - CASE: 295 × 265 × 147 mm - WITH TROLLEY: 516 × 516 × 1015 mm - CASE: 4 Kg - WITH TROLLEY: 23 Kg
DIMENSIONS WEIGHT LASER CLASS	160 VA - CASE: 295 × 265 × 147 mm - WITH TROLLEY: 516 × 516 × 1015 mm - CASE: 4 Kg - WITH TROLLEY: 23 Kg IV 25° 1-1000 ms
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE	160 VA - CASE: 295 × 265 × 147 mm - WITH TROLLEY: 516 × 516 × 1015 mm - CASE: 4 Kg - WITH TROLLEY: 23 Kg IV 25°
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE PULSE WIDTH	160 VA - CASE: 295 x 265 x 147 mm - WITH TROLLEY: 516 x 516 x 1015 mm - CASE: 4 Kg - WITH TROLLEY: 23 Kg IV 25° 1-1000 ms Device: IPX0 Handpiece: IPX0
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE PULSE WIDTH IP CLASSIFICATION	160 VA         - CASE: 295 × 265 × 147 mm         - WITH TROLLEY: 516 × 516 × 1015 mm         - CASE: 4 Kg         - WITH TROLLEY: 23 Kg         IV         25°         1-1000 ms         Device: IPX0         Handpiece: IPX0         Pneumatic footswitch: IPX4         0 ÷ 30°C         30 ÷ 75% non-condensing humidity
DIMENSIONS	160 VA         - CASE: 295 × 265 × 147 mm         - WITH TROLLEY: 516 × 516 × 1015 mm         - CASE: 4 Kg         - WITH TROLLEY: 23 Kg         IV         25°         1-1000 ms         Device: IPX0         Handpiece: IPX0         Pneumatic Footswitch: IPX4         0 ÷ 30°C         30 ÷ 75% non-condensing humidity         700 ÷ 1060 hPa         -10 ÷ 55°C         10 ÷ 100% non-condensing humidity
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE PULSE WIDTH IP CLASSIFICATION OPERATING CONDITIONS TRANSPORT AND STORAGE CONDITIONS	160 VA         - CRSE: 295 × 265 × 147 mm         - WITH TROLLEY: 516 × 516 × 1015 mm         - CRSE: 4 Kg         - WITH TROLLEY: 23 Kg         IV         25°         1-1000 ms         Device: IPX0         Handpiece: IPX0         Pneumatic Footswitch: IPX4         0 ÷ 30°C         30 ÷ 75% non-condensing humidity         70 ÷ 55°C         10 ÷ 100% non-condensing humidity         500 ÷ 1060 hPa         Maximum permissible exposure on skin 5600WJ
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE PULSE WIDTH IP CLASSIFICATION OPERATING OPERATINGS TRANSPORT AND STORAGE CONDITIONS MPE	160 VA - CRSE: 295 × 265 × 147 mm - WITH TROLLEY: 516 × 516 × 1015 mm - CRSE: 4 Kg - WITH TROLLEY: 23 Kg IV 25° 1-1000 ms Device: IPX0 Handpiece: IPX0 Pneumatic Pootsuitch: IPX4 0 ÷ 30°C 30 ÷ 75% non-condensing humidity 700 ÷ 1060 hPa -10 ÷ 55°C 10 ÷ 100% non-condensing humidity 500 ÷ 1060 hPa Maximum permissible exposure on skin 5600W/ m <sup>2</sup>
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE PULSE WIDTH IP CLASSIFICATION COPERATING CONDITIONS TRANSPORT AND STORAGE MPE MPE	160 VA         - CASE: 295 × 265 × 147 mm.         - WITH TROLLEY: 516 × 516 × 1015 mm         - CASE: 4 Kg.         - WITH TROLLEY: 23 Kg         IV         25°         1-1000 ms         Device: IPX0 Pneumatic Footswitch: IPX4         0 ÷ 30°C 30 ÷ 75% non-condensing humidity 700 ÷ 1000 hPa         -10 ÷ 55°C 10 ÷ 100% non-condensing humidity 500 ÷ 1000 hPa         Maximum permissible exposure on skin 5600W/ m <sup>2</sup>
DIMENSIONS	160 VA- CRSE: 295 × 265 × 147 mm • WITH TROLLEY: 516 × 516 × 1015 mm- CRSE: 4 Kg • WITH TROLLEY: 23 KgIV25°1-1000 msDevice: IPX0 Handpiece: IPX0 Pneumatic Footswitch: IPX40 ÷ 30°C 30 ÷ 75% non-condensing humidity 200 ÷ 1060 hPa10 ÷ 55°C 10 ÷ 100% non-condensing humidity 500 ÷ 1060 hPaMaximum permissible exposure on skin 5600W/ m²Maximum permissible exposure on connea 9W/ m²Nominal Ocular Hazard Distance 2,4m
DIMENSIONS WEIGHT LASER CLASS BEAM DIVERGENCE PULSE WIDTH IP CLASSIFICATION OPERATING OPERATINGS MPE NOHD COMPLIANCE	160 VA         - CASE: 295 × 265 × 147 mm.         - WITH TROLLEY: 516 × 516 × 1015 mm         - CASE: 4 Kg.         - WITH TROLLEY: 23 Kg         IV         25°         1-1000 ms         Device: IPX0         Pneumatic Footswitch: IPX4         0 ÷ 30°C         30 ÷ 75% non-condensing humidity         700 ÷ 1060 hPa         10 ÷ 55°C         10 ÷ 100% non-condensing humidity         500 ÷ 1060 hPa         Maximum permissible exposure on skin 5600W/         maximum permissible exposure on connea 9W/         m²         Nominal Ocular Hazard Distance 2,4m         En 60601-1; EN 60601-1-2; EN 60601-2-22

## OUR **PARTNERS** IN SPORTS







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