



# Doctor Tecar **SMART**

# WHAT IS DOCTOR TECAR SMART?

## THE PERFECT COMPROMISE BETWEEN PERFORMANCE AND FUNCTIONALITY

**Doctor Tecar SMART** is a device that can perform tecar therapy treatments, a method of energy transfer in capacitive and resistive mode which is able to stimulate the passage of energy in biological tissues and to activate the natural processes of repair and recovery.

**Doctor Tecar 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.



COMPACT, LIGHT  
AND EASY TO TRANS-  
PORT



EASY AND INTUITIVE  
USE



FULL CONTROL VIA  
TOUCH SCREEN



ONLY ONE VERSATILE  
HANDPIECE



CAPACITIVE  
AND RESISTIVE  
FREQUENCIES



PROTOCOLS FOR EF-  
FECTS 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.

## THE CONTROL IS IN YOUR HANDS



## 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.

**Doctor Tecar 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 **Doctor Tecar SMART** offers a large number of customization options, allowing the operator to optimize the therapy for every treatment.

The **Real Time Switching Wave Cube technology** allows switching from resistive to capacitive mode (and vice versa) with a simple touch, without changing the handpiece or applicator for faster and more accurate results.

Thanks to its 7” touchscreen, 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.

**Doctor Tecar SMART** also includes the **SSDTS system (Soft Start Doctor Tecar System)**: an innovative system that releases energy gradually only after contact. Thanks to the SSDTS system, the therapy is extremely effective, safe and controlled, thus avoiding the risk of annoying shocks that can occur when using other Tecar devices.



## VERSATILITY AND EFFICIENCY

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

### MAGNETIC ATTACHMENT



Changing the applicator is a frequent operation that can be difficult when the operator has cream on his hands. In order to make the operation easy, quick, and efficient, Mectronic has designed and patented the **DT-MAS magnetic system (Doctor Tecar Magnetic Attachment System)**.

## TWO WORK FREQUENCIES

**Doctor Tecar SMART** works in both resistive and capacitive modes, using two different frequencies that allow interacting and bringing the tecar energy to different areas of the body.

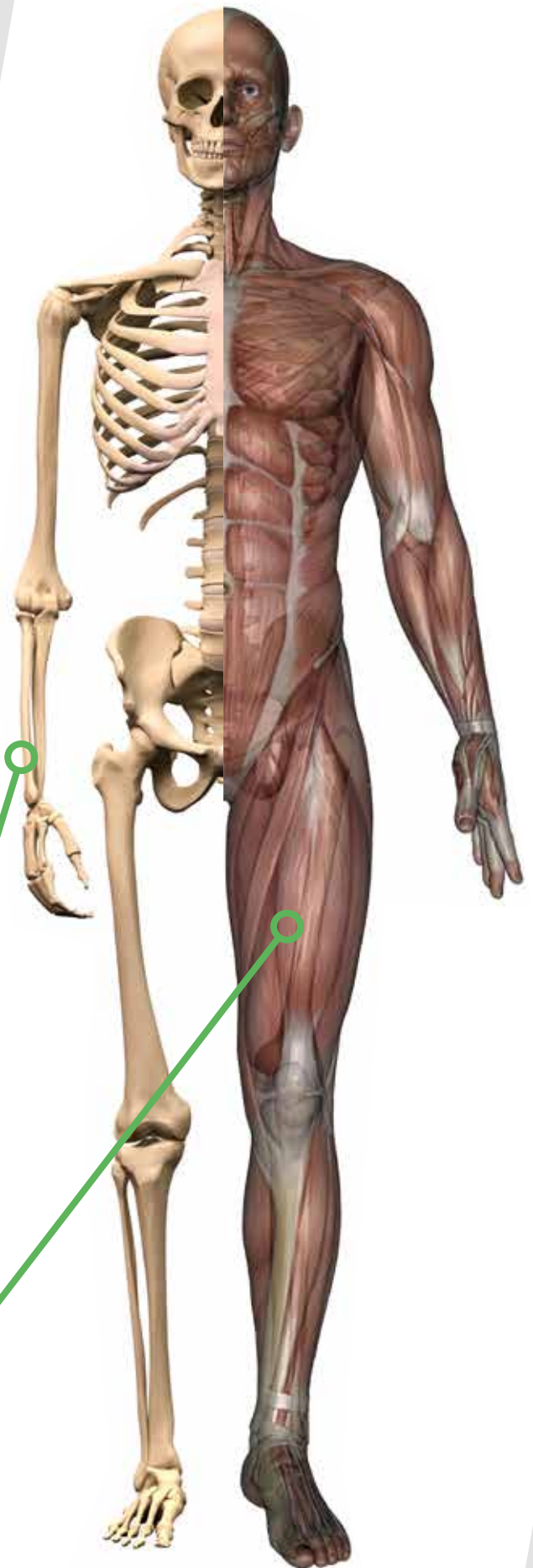
### RESISTIVE MODE

In **Resistive mode**, the lower frequency current (448 kHz) flows through the resistive parts of the human body, such as joints, ligaments, tendons and bones.



### CAPACITIVE MODE

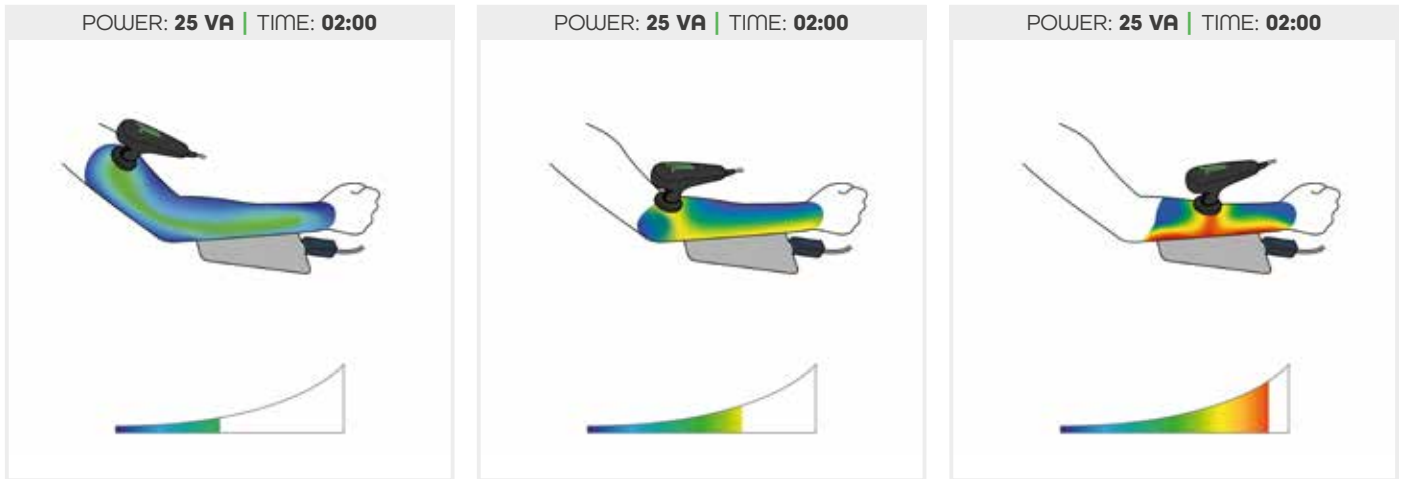
In **Capacitive mode**, the higher frequency current (750 kHz) mainly flows through the capacitive parts of the human body, such as muscles and areas with high fluid content.





**Doctor Tecar SMART** features an innovative system for measuring the amount of energy transferred to the tissues, which is shown to the therapist on the display and communicated by means of an acoustic signal. The system measures the energy transferred to the tissue in the anatomical region under treatment, in relation to time and the power supplied.

This system allows for the evaluation of active hyperemia and the resulting increase in the flow of electrolytes, showing the variation of the electrical impedance during treatment compared to the initial value, at rest. The impedance variation lasts until after the end of the treatment, guaranteeing the correct and continuous oxygenation of all tissue components that are treated.



## 2 EMISSION MODES

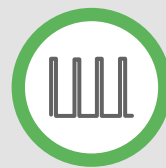
**Doctor Tecar Smart** offers two types of different emission modes: continuous emission (CW) and pulsed emission (PULS), each one with unique advantages and features, allowing the operator to fully control the therapy with a few simple settings.

### CONTINUOUS EMISSION (CW)

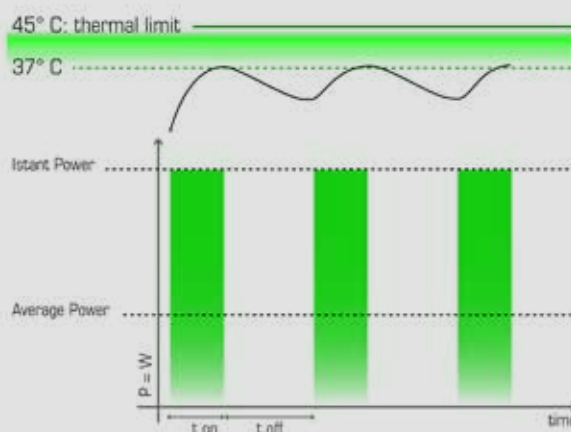


The continuous emission mode allows for constant delivery of tecar current, transferring a controlled amount of energy to the tissues directly affected by the therapy.

### PULSED EMISSION (PULS)



The pulsed emission mode allows for delivery at regular time intervals, avoiding an excessive increase of the internal temperature and thus treating pathologies in the acute phase.



## THE IDEAL SOLUTION FOR EVERY NEED

To further customize the therapy, **Doctor Tecar SMART** has different types of protocols that allow every therapist to find the right solution for his needs.



### 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.



### JOULE MODE

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

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



### PROTOCOLS FOR PATHOLOGY

**Doctor Tecar SMART** features a complete pathology library with over 30 therapeutic protocols to treat the most common problems. The software also offers the safety of instant visual feedback displaying power, emission mode, therapy time and treatment area.



## AVX AUTOMATIC MODE (OPTIONAL)



The automatic mode of **Doctor Tecar SMART** has been designed to allow the therapist's freedom of movement and to optimize time.

The special cable and the three electrodes also allow treating even the most complex areas of the human body.








The safety of our patients must always come first: for this reason Mectronic has designed a safety button to allow the patient to stop therapy at any time.

While the automatic mode is running, the therapist can also perform other treatments on the same patient, optimizing therapy times and further expanding the therapeutic possibilities offered by **Doctor Tecar SMART**.


















## ACCESSORIES

### INCLUDED

|  |   |   |  |
|--|---|---|--|
|  | Code 20MA.DT<br><b>Doctor Tecar SMART handpiece</b><br>with magnetic attachment                           |  | Code 20WI.COMUNE<br><b>Doctor Tecar SMART Cord</b><br>with terminal For Common Plate connection            |
|  | Code 20PI.DTP35P<br><b>Tecar SPX small flat plate</b> with cover made of biocompatible materials, Ø 35 mm |  | Cod. 20PI.DTP60P<br><b>Tecar SPX medium flat plate</b> with cover made of biocompatible materials, Ø 60 mm |
|  | Code 30PI.DT150x200<br><b>Small common plate</b><br>Stainless steel, 150 x 200 mm                         |  | Code 30CR.DTIL<br><b>Jar of conductive cream For diathermy (IL)</b><br>without dispenser                   |
|  | Code 50WI.AL2MT.SCH<br><b>Power cord</b><br>With Schuko plug  |   |  |

### OPTIONAL

|  |   |   |  |
|--|---|---|--|
|    | Code 30MA.BIPO-G<br><b>SMART large straight bipolar handpiece</b>   |    | Code 30MA.BIPO-P<br><b>SMART small straight bipolar handpiece</b>  |
|    | Code 20PI.DTP85P<br><b>Tecar SPX large flat plate</b> with cover made of biocompatible materials, Ø 85 mm     |    | Code 20PI.DTB35P<br><b>Tecar SPX small rounded plate</b> with cover made of biocompatible materials, Ø 35 mm |
|    | Code 20PI.DTB60P<br><b>Tecar SPX medium rounded plate</b> with cover made of biocompatible materials, Ø 60 mm |    | Code 20PI.DTB85P<br><b>Tecar SPX large rounded plate</b> with cover made of biocompatible materials, Ø 85 mm |
|    | Code 20PI.DTP85P<br><b>Tecar SPX medium impedance plate size small</b> , Ø 35 mm                              |    | Code 20PI.DTP85P<br><b>Tecar SPX medium impedance plate size medium</b> , Ø 60 mm                            |
|   | Code 30PI.DT200x280<br><b>Large common plate</b><br>Stainless steel, 200 x 280 mm                             |   | Code 30CL.PLS-T<br><b>PLUS trolley, Tecar version</b><br>For device and accessories<br>516 x 516 x 840 mm    |
|  | Code 30CR.DTILF<br><b>Bottle of conductive cream For diathermy (IL)</b>                                       |   |  |
|  | Code 30BO.F-MM<br><b>NYL Flex protective bag</b><br>For device transport                                      |  | Code 30BO.R-MM<br><b>Rigid protective bag</b><br>For device transport  |
|  | Code 50WI.AL2MT-IT<br><b>Power cord</b><br>with Italian plug  |  | Code 30WI.AL90.SCH<br><b>Power cord</b><br>with 90° Schuko plug  |

### AVx (OPTIONAL)

|  |   |   |   |
|--|---|---|---|
|  | Code 20WI.SEQ<br><b>Triax SMART cable</b><br>For adhesive electrodes connection         |  | Code 30WI.PPAZ<br><b>Patient safety button</b><br>For therapy interruption                  |
|  | Code 30EL.MM-40x80<br><b>Mectronic electrode</b><br>40 x 80 mm<br>Package of 120 pcs    |  | Code 30PI.ADGE<br><b>Adhesive plate For adults (FIAB)</b> 202 x 101 mm<br>Package of 25 pcs |
|  | Code 20SW.AVX.SM<br><b>AVx automatic mode software update</b><br>For Doctor Tecar SMART |  | Code 30PI.PED<br><b>Adhesive plate For children</b><br>Package of 25 pcs                    |

## TECHNICAL SPECIFICATIONS

|                           |   |
|---------------------------|---|
| <b>SOFTWARE</b>           | Mectronic's own MecOS 5.0 Real-Time Operating System  |
| <b>POWER</b>              | 70 VA effective (210 Wpp)   |
| <b>BIOTRANSFER</b>        | Display and acoustic  |
| <b>CONNECTION</b>         | Contact control system  |
| <b>CABLE CHECK</b>        | Guided procedure with graphic and acoustic feedback   |
| <b>DISPLAY</b>            | 7" TFT IPS color display with capacitive touch screen   |
| <b>FREQUENCIES</b>        | - 448 kHz<br>- 750 kHz  |
| <b>PROTOCOLS</b>          | Over 80 preset protocols  |
| <b>EMISSION MODE</b>      | - CW<br>- Pulsed  |
| <b>OPERATING MODE</b>     | - Resistive<br>- Capacitive   |
| <b>WORK MODE</b>          | - Timer<br>- Joule  |
| <b>POWER SUPPLY</b>       | 100÷240 V 50÷60 Hz  |
| <b>SPECIAL MODES</b>      | Protocols to maximize the main effects: <ul style="list-style-type: none"> <li>- Biostimulant</li> <li>- Anti-inflammatory</li> <li>- Contracture-relieving</li> <li>- Anti-edema</li> <li>- Analgesic</li> </ul> |
| <b>AVX AUTOMATIC MODE</b> | Simultaneous automatic mode (optional)  |
| <b>ABSORPTION</b>         | 250 VA  |
| <b>SIZES</b>              | - CASE: 295 x 265 x 147 mm<br>- WITH TROLLEY: 516 x 516 x 1015 mm   |
| <b>WEIGHT</b>             | - CASE: 3,5 Kg<br>- WITH TROLLEY: 22,5 Kg   |
| <b>COMPLIANCE</b>         | IEC/EC 60601-1, 60601-2   |
| <b>CERTIFICATION</b>      | CE0051  |
| <b>DIRECTIVE 93/42/CE</b> | IIb Classification  |
| <b>WARRANTY</b>           | 2 Years   |



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