

# I-TECH UT1

High tech professional device for ultrasound therapy (1 MHz and 3 MHz).

The excellent ultrasound beam characteristics and the ergonomic design of ultrasound handle guarantee a high standard treatment.



**MEDICAL DEVICE CLASS IIa**

I-TECH UT1 is a medical device CE0476.

## KIT

- ✓ I-TECH UT1 device
- ✓ 1 ultrasound heads: 5 cm<sup>2</sup>
- ✓ Medical power supply
- ✓ Gel for ultrasound therapy
- ✓ User manual

## TECHNICAL FEATURES

- ✓ Power supply input 100V-240V, 47Hz-63Hz, 1.35A, output 15V 3A Max.
- ✓ Ultrasound frequency 1 MHz ± 10%, 3 MHz ± 10%
- ✓ Output power
  - 0.5 W – 10 W ± 20% when duty cycle ≥ 80% for 5 cm<sup>2</sup> ultrasound head
  - 0.5 W – 15 W ± 20% when duty cycle ≤ 70% for 5 cm<sup>2</sup> ultrasound head
- ✓ Effective intensity
  - 3 W/cm<sup>2</sup> ± 20% (1 MHz)
  - 3 W/cm<sup>2</sup> ± 20% (3 MHz)
- ✓ Working frequency 100 Hz
- ✓ Duty cycle 10%-100% stepping 10%
- ✓ Maximum adjustable therapy time 30 minutes
- ✓ Effective radiating area 5 cm<sup>2</sup> ± 20%
- ✓ Collimated beam type
- ✓ Ultrasound head (material) aluminium
- ✓ Direct contact and water immersion use
- ✓ Led indicator for ultrasound head detector
- ✓ On-line guide on LCD display for fast instructions

## MAIN TREATMENTS

- ✓ Tendinitis
- ✓ Bursitis
- ✓ Capsulitis
- ✓ Hematomas and tissues reconstructions
- ✓ Muscle contractures
- ✓ Cramps
- ✓ Neuralgias
- ✓ Periarthritis
- ✓ Cervicalgias
- ✓ Sciatalgy/Lumbalgy
- ✓ Carpal tunnel syndrome
- ✓ Epicondylitis/epitrocleititis
- ✓ Contusions
- ✓ Sprains
- ✓ Condripathy
- ✓ Massage
- ✓ Arms/abdomen/legs/gluteus cavitation
- ✓ Acne

## DIMENSIONS

300 x 186 x 86 mm

# I-TECH UT1

## HOW DOES IT WORK

Ultrasounds are mechanical sound waves with frequencies higher than frequencies audible by the human ear. Ultrasounds propagate through compression-decompression waves. They cross tissues and cause particles vibration. Ultrasound ability to deeply penetrate the tissues is in inverse proportion to the ultrasound beam frequency (1 MHz and 3 MHz).

Ultrasound wave crossing through anatomic structures provokes different biological effects (mechanical, thermal and cavitation):

- ✓ Frequency (1 MHz or 3 MHz)
- ✓ Analgesic and anti-inflammatory
- ✓ Decontracting (muscle relaxation)
- ✓ Fibrinolytic and trophic (hematomas reabsorption, soft calcifications reductions, healing tissues stimulation)

I-TECH UT1 have been developed to meet professional user requirements as performance, handiness and therapeutic protocols management.

I-TECH UT1 is provided with 10 preadjusted programs and professional user can modify, and memorize, the following parameters:

- ✓ Frequency (1 MHz or 3 MHz)
- ✓ Effective intensity (up to 3 W/cm<sup>2</sup>)
- ✓ Duty cycle (10%÷100% stepping 10)
- ✓ Therapy time (up to 30 minutes)

Water immersion treatments are allowed with I-TECH UT1.

In this way it is possible to treat irregular areas or pain zones where direct contact is difficult. The right contact between ultrasound head and skin is constantly detected by LED indicator during treatment.

Trolley with 3 shelves and power sockets

**Handle**  
with 5 cm<sup>2</sup> ultrasound head

