

# ΔSTAR.



YOU CAN RELY ON US AT ALL TIMES

# PhysioGo.Lite COMBO

VER. 1.0

multifunctional unit



## ERGONOMICS

- three independent treatment channels
- intensity in patient circuit can be adjusted for both channels simultaneously or separately
- electrodes test
- possibility of two SnG heads operating simultaneously, their total area of head front in dualsection equals 34,6 cm<sup>2</sup>
- manual mode
- treatment programs selected by name or medical field
- preset treatment programs database
- preset treatment sequences database (electrotherapy)
- user programs database
- user sequences database (electrotherapy)
- list of favorite programs
- names of user programs and sequences can be edited
- built-in encyclopedia with treatment methodology
- availability of LIPUS therapy
- statistics of performed treatments
- buzzer volume adjustment
- optional battery



## ELECTROTHERAPY

- CC (constant current) mode or CV (constant voltage) mode operation
- complete galvanic insulation between the channels in each mode

## CURRENTS AND METHODS

- isoplanar interferential currents
- dynamic interferential currents
- one-channel AMF interferential current
- TENS symmetric
- TENS asymmetric
- TENS with alternately changing polarization
- TENS Burst
- TENS for spastic paralysis
- Kotz' current (Russian stimulation)

- tonolysis
- Hufschmidt stimulation
- diadynamic currents (MF, DF, CP, CP-ISO, LP, RS, MM)
- rectangular pulse currents
- triangular pulse currents
- Ultra Reiz current (Träbert's current) (2 – 5)
- Leduc's current (1 – 9)
- neofaradic pulse currents
- unipolar sine surge
- bipolar sine surge
- galvanic current
- microcurrents
- medium frequency MF currents
- IG pulses
- EMS currents
- H-waves
- exponential pulses



### ULTRASOUND THERAPY

- water resistant heads
- continuous/ pulse emission mode
- lack of US head contact detection (effective treatment time measured)
- US head temperature control
- US head sensitivity adjustment

### ULTRASOUND HEADS

GU-1 type	1 cm <sup>2</sup> ; 1/ 3 MHz
GU-5 type	5 cm <sup>2</sup> ; 1/ 3 MHz
SnG type	17,3 cm <sup>2</sup> ; 1/ 3 MHz

### COMBINED THERAPY

- CC (constant current) mode or CV (constant voltage) mode operation

#### CURRENTS IN COMBINED THERAPY

- TENS pulse currents
- AMF current
- Kotz' current
- Medium frequency currents
- EMS

### TREATMENT PROGRAMS

- preset treatment programs, including:
  - pre-defined treatment programs for electrotherapy 71
  - pre-defined treatment programs for ultrasound therapy 156
  - pre-defined treatment programs for combined therapy 77
- user-defined programs – electrotherapy 50
- user-defined programs – ultrasound therapy 50 (for each applicator)
- user-defined programs – combined therapy 50
- favorite programs

### TREATMENT SEQUENCES

- preset treatment sequences for electrotherapy 44
- user-defined sequences 10



### TECHNICAL SPECIFICATION

#### Electrotherapy parameters

- max. current intensity in patient circuit (CC mode)
  - unipolar sine surge 30 mA
  - galvanic, IG 80 mA
  - diadynamic 70 mA
  - bipolar sine surge, Hufschmidt stimulation 100 mA
  - interferential, TENS, Kotz's stimulation, pulse currents, MF, tonolysis, EMS, H-waves, exponential pulses 140 mA
  - microcurrents 1000 µA
- max. voltage amplitude in the patient circuit (CV mode) 140 V
- treatment timer 1 – 60 minutes

#### Ultrasound parameters

- frequency of operation 1 MHz and 3 MHz
- total area of the head front GU-1; GU-5 ;SnG 1 cm<sup>2</sup>; 5 cm<sup>2</sup>; 17,3 cm<sup>2</sup>
- max. ultrasound intensity 2/3 W/cm<sup>2</sup>
- frequency in pulse mode 10 – 150 Hz with a variable step for GU-1, GU-5, SnG  
1 kHz LIPUS
- regulated duty factor in pulse mode
- treatment timer 30 s – 30 minutes

#### General parameters

- wymiary aparatu 25,0 x 27,0 x 16,5 cm
- weight max. 3 kg
- battery type (optional) Li-Ion
- battery capacity (optional) 2100 mAh
- mains supply 100 – 240 VAC, 50/60 Hz, 24 VDC, 2,5 A



### STANDARD ACCESSORIES

- GU-5 head; 1/ 3 MHz; 5 cm<sup>2</sup> with holder 1
- mains cable with filter 1
- switch mode power supply 1
- patients' cables 2
- electrodes 6x6 cm 4
- electrodes 7,5x9 cm 2
- viscose covers 8x8 cm 8
- viscose covers 10x10 cm 4
- velcro belt 40x9 cm 2
- velcro belt 100x9 cm 2
- USG gel 1
- touchscreen stylus pen 1
- touchscreen cleaning cloth 1
- masking covers with cutout 2
- spare fuses 1

- instructions for use 1
- electrical safety test report 1

**OPTIONAL ACCESSORIES**

- self-adhesive electrodes 5x5 cm, 5x10 cm
- point electrodes with adapter 6 mm, 10 mm, 15 mm, 20 mm
- sand bags 21x14 cm, 21x28 cm
- GU-1 head; 1/ 3 MHz; 1 cm<sup>2</sup> with holder
- SnG head; 1/ 3 MHz; 17,3 cm<sup>2</sup> with holder
- bag for the unit and accessories
- Versa/ Versa X/ Versa XUVC trolley
- battery

# Together for Many Years

Trust is a value developed throughout the years while building good mutual relationships. ASTAR works on it since 1995, constantly broadening its experience in designing the highest quality medical equipment. That our products and services meet all the expectations for us is the matter for pride and an impulse for constant growth in this area. In addition, we continue to adhere to the highest standards, analysing the quality of our devices, both at the designing stage and during postproduction tests.



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[youtube.com/fizjotechnologia](https://youtube.com/fizjotechnologia)

The domain of ASTAR is the manufacture of devices for electrotherapy, laser therapy, ultrasound therapy, magnetotherapy, light therapy, vacuum therapy and shockwave therapy.

At the designing and manufacturing stages, the foundation is the thorough knowledge of the specialists engaged by ASTAR. It is a team of experts constantly extending their expertise and analysing every detail of the devices they design. Their dedication entails constant search for new solutions to raise the comfort of ASTAR equipment operation and optimise the effects of the therapies.

We operate on numerous markets outside Poland. Our products are known and appreciated in Europe, Asia, Africa, South & North America as well as in Australia.

An important sign of our effective work is the awards received from sector experts that have recognized ASTAR products on numerous occasions. We were rewarded as the "Gold Quality of the Year" in the Quality Promotion Program and with the Business Gazelle in 2010, 2014 and 2015. Since 2016, we have been recognized with the title of "Trustable Company" as a reliable company that provides services at the highest level.

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