Function Tester STIMU-600



Testing system for function tests of electro-stimulation equipment

- ☑ touchscreen or PC operation
- ☑ graphical display of signals
- ☑ measurement of interference current values
- ☑ identification of beats
- ☑ user specific language setting
- ☑ accumulator operarated handily device





Technical Data

Mains Voltage: + 6 V DC or internal accumulator operation
Protection class: internal power supply

Environmental temperature: +5 - +40 °C Storage temperature: -10 - +50 °C

Timer: OFF, 3, 5, 10 min, \pm 1 sec

Interface: 1 x Mini USB Type B for PC connection
Testing device connections: 6 sockets 4 mm

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Display: 4,3" TFT-Display

Operation: Touchscreen

Mechanical data: light weight metal case IP20
Dimensions: 167 x 190 x 37 mm (W x H x D)
Weight: approx. 1,2 kg

Selectable languages: german, english, french, polish

spanish, italian, portuguese, turkish

Load resistance: Ranges of measurement: ± 100 V \pm 10 V + 700 V + 0.1 V or 1 % of measurement value 10000 Ohm ± 3 % $0 - 1 \, mA$ 0 - 10 mA0 - 70 mA0 - 50 mA0 - 350 mA2000 Ohm ± 2 % $0 - 5 \, \text{mA}$ 1000 Ohm + 1 % 0 - 10 mA0 - 100 mA0 - 700 mA0 - 200 mA0 - 1400 mA500 Ohm ± 1 % 0 - 20 mA0 - 33 mA0 - 333 mA 0 - 2333 mA 300 Ohm + 2 % 0 - 125 mA 0 - 1250 mA 0 - 8750 mA 80 Ohm \pm 2 % (extern) 1, 10, 20, 200 ms Time base electro-stimulation (selectable): Time base nerve-stimulaion (fix): 1.5 sec 100 μs (200 μs Minimum pulse width: bipolar) Frequency bandwidth for rms-value determination: Determination of rms-value for input signals: ± 5 % Measurement of maximum-value: ± 5 % Measurement of the DC component: ± 5 % Measurement of the interference-current signal: \pm 5 %

Description of functions:

The STIMU-600 serves for functional testing of electro-therapy equipment which operates with DC, low frequency, medium frequency or interference current. STIMU-600 checks the rms values for current and voltage, the beat for interference-current equipment, the DC component and frequency. The signal curves can be displayed. The measured values are displayed and can be stored in measurement protocols. The STIMU-600 determines the following measured values:

- rms current and rms voltage (maximum, rms value, plot of curve)
- displays values of the input signals
- frequency of the input signal and the rms signal
- DC component
- interference current
- beat frequency.

STIMU-600 offers three measurement channels with program-controlled, adjustable load-resistance. 300 Ohm, 500 Ohm, 1000 Ohm, 2000 Ohm and 10 kOhm can be set. In addition to that 80 Ohms can be realized by an external resistor.

Measurement of rms current and rms voltage:

Measurement of the rms values of voltage and current takes place by means of an rms-value converter. This unit converts either the signal from the selected channels or the sum of these signals into a true rms value.

Measurement of frequency:

Frequency determination of sine-wave signals:

Measurement of pulse width:

Determination of the signal frequency can take place for the original signals as well as for rms-value signals or for the interference signals.

±7%

± 25 µs

DC component:

Measurement of the DC component takes place by means of low-pass filtering with a time constant of 400 ms

Measurement of interference current and determination of beat:

Interference-current devices have two or more electro-stimulation channels, one of them usually has a fixed amplitude and frequency - and the other one, fixed amplitude and changeable frequency or phase. As described above, the current and frequency values for the individual channels can be measured for each channel. Additionally, the interference current is measured as rms-value of the sum of two individual channels and can be displayed.

Nerve stimulators:

The measurement values are determined using continuous signals (without pause times), the parameters of which must be within the technical specifications of the STIMU-600.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 02/2020)





