



The GS Testing Module for function tests of electro-stimulation equipment

- ☑ graphical display of signals
- ☑ automatic measurement sequences with PC – Software
- ☑ measurement of interference current values
- ☑ identification of floatings
- ☑ measurement of effective current and voltage

Technical Data

Load resistance:	$\pm 1\%$ or $\pm 2\%$	2700 Ohm mA	1000 Ohm mA	500 Ohm mA	380 Ohm mA	80 Ohm mA
Ranges of measurement:	1 $\pm 10\text{ V}$ 2 $\pm 100\text{ V}$ 3 $\pm 700\text{ V}$ $\pm 0,1\text{ V}$ or 1 % of measurement value	0 - 3,7 0 - 37 0 - 260	0 - 10 0 - 100 0 - 700	0 - 20 0 - 200 0 - 1400	0 - 26 0 - 260 0 - 1842	0 - 125 0 - 1250 0 - 8750
Frequency bandwidth for rms-value determination:		30 kHz				
Determination of rms-value for input signals:		$\pm 5\%$				
Measurement of maximum-value:		$\pm 5\%$				
Measurement of the DC component (at channel 1):		$\pm 5\%$				
Measurement of the interference-current signal:		$\pm 5\%$				
Frequency determination of sine-wave signals:		0,5 Hz - 10 kHz, $\pm 0,1\text{ Hz}$ or 1 % of measurement value				

Description of functions:

The GS Testing Module STIMU serves for functional testing of electro-therapy equipment which operates with DC, low frequency, medium frequency or interference current. STIMU checks the rms values for current and voltage, the beat for interference-current equipment, the DC component and frequency. The GS Basic Unit and the ACTIMED Testing Program are required for testing with this plug-in module. The signals are displayed and can be stored as test records. STIMU determines the following measured values:

- rms current and rms voltage (maximum, rms value, plot of curve),
- Values for input signal, for display,
- Frequency of the input signal and the rms signal,
- DC component,
- Interference current,
- Beat frequency.

The GS STIMU module offers two measurement channels with program-controlled, adjustable load-resistance value: 500, 1000 and 2700 Ohm. An external resistor furnishes a load resistance of 80 Ohm.

Measurement of rms current and rms voltage:

Measurement of the rms values of voltage and current takes place by means of a rms-value converter. This unit converts either the signal at measurement channel 1 or at 2 or the sum of both of these signals, into a true rms value.

Measurement of frequency:

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

DC component:

Measurement of the DC component takes place on channel 1 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 electro-stimulation channels, in which most likely one of them has a fixed amplitude and frequency - and the other one, a fixed amplitude and variable 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 the two individual channels and can be graphically displayed.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 02/2023)