ALEA Solutions – Engineering & Life Science

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Elektro Nervstimulator AS100



Konstantstromquelle, Arbiträr Funktionsgenerator

Konstantstromquelle mit freien Pulsformen für die Elektrophysiologie

Mit diesem Stimulator können Strompulse in freien Formen erzeugt und galvanisch isoliert appliziert werden. Das Gerät ist vielseitig einsetzbar, da zur Steuerung des Stimulationsstroms eine analoge Spannung verwendet wird.

Während der Stimulation lassen sich der effektiv geflossene Strom und die entsprechende Spannung messen. Damit ist es möglich, die Elektroden-Impedanz zu überwachen und AS100 für Anwendungen mit Biofeedback einzusetzen. Die mehrstufige Strombegrenzung am Gerät und die integrierte Leistungsüberwachung bieten eine erhöhte Sicherheit.

Bei Verwendung eines PCs mit einer Messkarte lassen sich die Stimulationsparameter bequem am Bildschirm einstellen, verändern und die erzeugten Pulse grafisch darstellen.

AS100 wurde als medical device component nach EN 60601-1 entwickelt und geprüft und bietet eine entsprechend hohe Sicherheit.

Electrical Stimulator AS100

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Constantcurrent-source, Arbitrary functiongenerator

Constantcurrent-source with arbitrary pulses for electrophysiology

AS100 is a flexible and certified current source for electrical stimulation of arbitrary waveforms.
It directly outputs a current that is proportional to the applied input voltage and can therefore be used for many purposes such as nerve stimulation, evoked potentials, functional electrical stimulation (FES), biofeedback etc. Enhanced safety features include manual limitation of current and energy restrictions. AS100 is compliant with EN 60601-1 (medical device component) and provides a high level of safety.

AS100 Referenzen

- Probing neural circuitry for the control of movement: insights from stimulation studies
- Dietz
- Completed research project
- http://www.research-projects.uzh.ch/p9655.htm

- The facilitatory effect of duloxetine combined with pelvic floor muscle training on the excitability of urethral sphincter motor neurons
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