g.Estim PRO

CORTICAL STIMULATOR

g.tec GUGER TECHNOLOGIES

Fully programmable constant-current electrical stimulator for invasive use in human patients

- Delivers biphasic constant current pulses
- Stand-alone device that is configured and controlled from a computer system
- Can send triggers to other devices for synchronization
- Includes electrode impedance check and stimulation current monitoring
- CE-certified (Europe) and FDA-cleared (USA) medical device for use in human patients

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g.*Estim PRO* description

g.Estim PRO is a constant current, biphasic electrical stimulator intended for stimulation of neural tissue. g.Estim PRO has an applied part of type BF with connectors for bipolar stimulation electrodes (anode and cathode). The device is controlled by a computer via USB connection. It also has digital outputs for synchronization with other devices. A hand-switch allows you to perform stimulation manually. Alternatively, a foot-switch can be used to explicitly enable / disable stimulation.

g.Estim PRO includes an impedance check and measures the actually applied stimulation current and voltage for verification purposes. With its 80V compliance voltage, it is perfectly suited for use with standard as well as high-impedance electrodes. The device is CE certified (Europe) and cleared by the FDA (USA) for use in human patients for investigations like electrical cortical stimulation (ECS) mapping.

The intended use

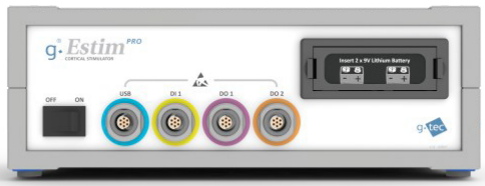
The g.Estim PRO is intended for functional brain mapping via electrical stimulation prior to cortical resections in the vicinity of essential cortex. The device must be used by medically trained and qualified personnel within a medical environment.

General specifications

Stimulus current output	± 0.2 - 15 mA (±10% or 50µA whichever greater)
Phase shape	rectangular
Phase duration	0.1 - 1.0 ms in 10 µs increments (± 10% or ± 20 µs whichever greater)
Pulse rate	2 - 100 pulses / second in 0.1 increments (±10%) (Pulse onset interval from 500 ms down to 10 ms)
Train duration	1 pulse - 20 seconds
Power supply	2 x 9 V battery, USB - connection

The device is designed and manufactured according to the following norms:
IEC 60601-1, IEC 60601-1-2, IEC 60601-2-40, IEC 62304, IEC 62366, ISO 14971

Rx only



rear view


foot switch


hand switch

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