

Design and Manufactured in Tanin Pardaz Pasargad Research and design

The Knowledge-Based Company, "Tanin Pardaz Pasargad" is an Innovative Company in the Field of Diagnostic and Treatment Hearing Systems. Our Goal is to be with Hearing Specialists and Provide Effective Tools to Help Hearing Community.

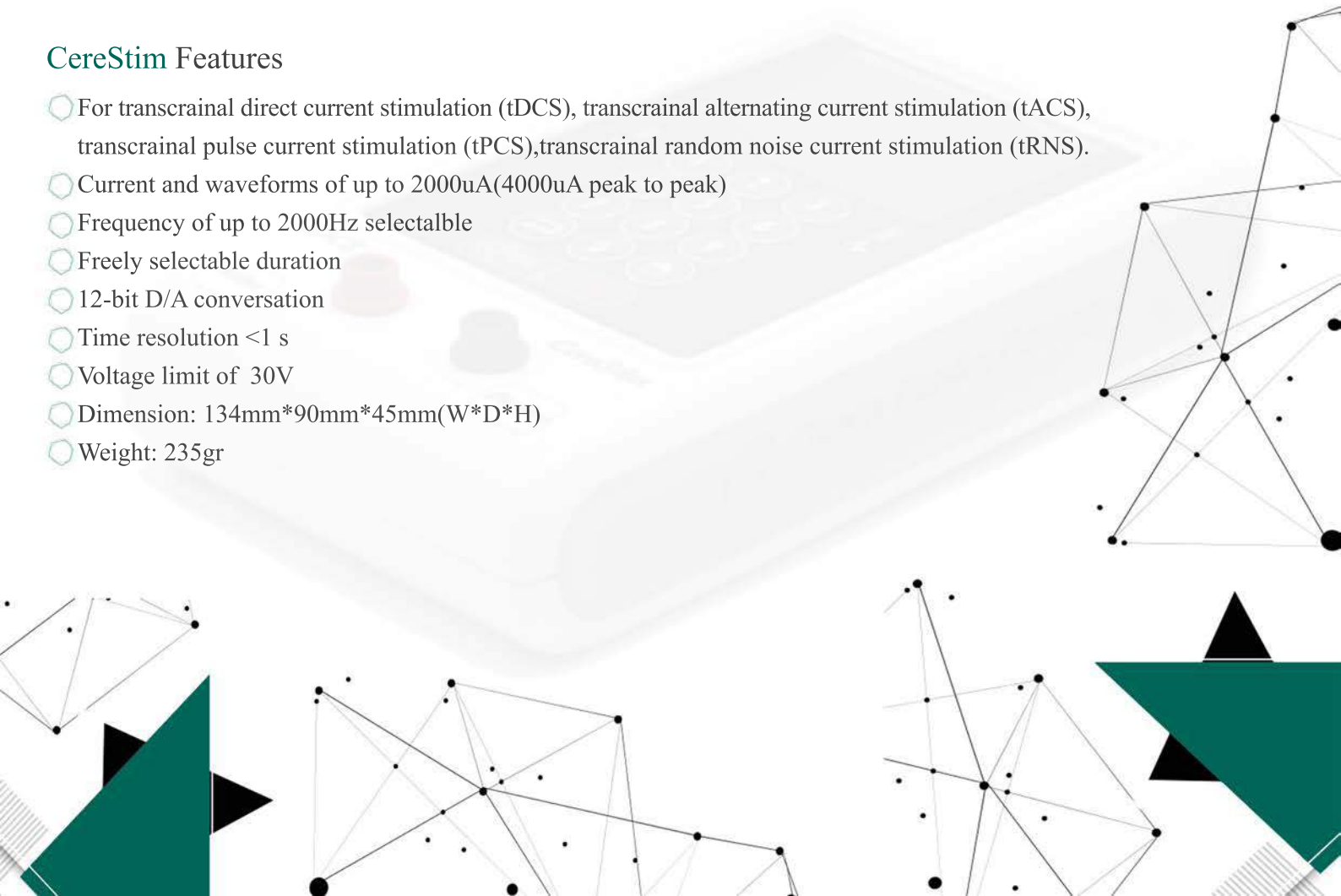


## Programmable, Single Channel Direct, Alternating and Random Noise Current Stimulator

The CereStim is a stimulator for use in scientific research that provides a stimulation using weak direct or alternating current (Transcranial Electrical Stimulation tES) within non-invasive interventional Neurophysiology. The electrical charge and current density applied through a constant current source are far below the threshold for releasing a stimulus. Depending on the duration, the used current, the current density, and the frequency the stimulation has a modular effect on existing neuronal elements by either activating or inhibiting cortical activity.

### CereStim Features

- For transcranial direct current stimulation (tDCS), transcranial alternating current stimulation (tACS), transcranial pulse current stimulation (tPCS), transcranial random noise current stimulation (tRNS).
- Current and waveforms of up to 2000 $\mu$ A (4000 $\mu$ A peak to peak)
- Frequency of up to 2000Hz selectable
- Freely selectable duration
- 12-bit D/A conversion
- Time resolution <1 s
- Voltage limit of 30V
- Dimension: 134mm\*90mm\*45mm(W\*D\*H)
- Weight: 235gr



## Areas of Applications/Treatment



### Safety

Highest safety standards thanks to (hardware- and software-based) multistage monitoring of the current path.



### Insomnia & Anxiety

Studies demonstrated the effect of tDCS on insomnia and anxiety.



### Depression

tDCS is a promising therapeutic strategy that offers the opportunity for non-invasive modulation of cortical excitability and plasticity in psychiatric disorders.



### Neuroscientific research

Relevance of tES in scientific research Non-invasive transcranial electrical stimulation (tES) is known to modulate brain activity in both healthy subjects and patients with neurological disorders.



### Other Medical Use

Recent research on tDCS has shown promising results in treating other mental health conditions such as PTSD, Parkinson, Alzheimer's disease.

