

Starstim[®]-Home technical specifications

DEVICE

Starstim-Home tES

Number of channels	8 Channels
Communication	WPA2PSK-Encrypted Wi-Fi IEEE 802.11 g
Rechargeable system using Li-Ion battery	✓
Device dimensions	89.1 mm x 61.1 mm x 23.8 mm
Device weight	86 g
Operating time (WiFi communication)	4.5 hours (8-channel tDCS)

DEVICE tES SPECIFICATIONS

Sampling rate	1000 S/s
Frequency range	0 to 250 Hz (tACS) and 0 to 500 Hz (tRNS)
Configurable bandpass filter for tRNS	✓
Available stimulation techniques	tDCS, tACS, tRNS, custom waveforms, temporal interference
Parameterizable sham protocols	✓
Maximum current per channel	± 2mA
Max total injected current (by all electrodes, any time)	4mA
Current accuracy	10%
Current resolution	1 µA
Current configurable independently for each channel	✓
Configurable Ramp-up and Ramp-down times	✓
Voltage	± 15 V per electrode (30 V potential difference)

HOME TABLET

Model	Microsoft Surface Go
Storage	64 GB eMMC Flash
Display	10 inch 3:2
Memory	4096 MB
Weight	523 g
Operating system	Microsoft Windows 10
Data communication	End-to-end encrypted, with researcher software via WiFi card, with the device via USB-C WiFi dongle

HOME TABLET SOFTWARE

Mandatory impedance pre-check and continuous monitoring	✓
Abort functionality	Abort button, auto-abort on disconnection / high impedances
Mandatory pre-session treatment schedule synchronization	✓
Session access only upon schedule	✓
Device setup and maintenance instruction steps	✓

RESEARCHER SOFTWARE

Web-based treatment schedule and compliance monitoring dashboard	✓
Real-time email notifications on treatment events	✓
Secure storage of treatment events, impedances, questionnaires	Yes (5-year storage license included)
Custom bipolar, high-definition, 4x1 or multi-channel montage design	✓
Optimized Stimweaver montages import	✓
Advanced Visualization of tES Field Distribution	✓

HEADSET

Available headcaps	6 sizes: 42/46/49/54/57/60cm
Custom montages	Headcaps available with 39 or 64 of 10-10 EEG system positions

Starstim[®]-Home product content

Starstim-Home tES

1 x Starstim-Home tES NECBOX
1 x Home tablet
1 x Home Neoprene Headcap Size M
1 x NG Pistim (bag of 8)
1 x Sponstim 25 (bag of 4)
1 x Earclip
1 x 10 Electrode cable color-coded
1 x Saline solution 100 ml
1 x Signage!® Electrode Gel (250g)
2 x Curved syringe
1 x USB wifi dongle & USB-C to USB adapter
1 x Wifi devices power adapter
1 x Portal: free institutional account credentials
1 x Starstim-Home tES cloud data storage: 5-year license
1 x USB Stick with manuals & Software
1 x Neoprene punch tool
1 x Headcap positions coloring kit
1 x Testboard head & Cable