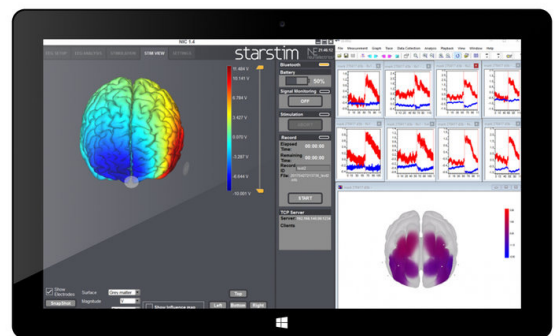# Starstim fNIRS

Combined wireless fNIRS-tDCS-EEG

Most optimal wireless solution for brain simulation and imaging.

Combine transcranial current stimulation (tCS: tDCS, tACS, tRNS) and electroencephalography (EEG) with fNIRS in one single headset.

Includes Neuroelectrics® StarStim (tCS and EEG) and Artinis OctaMon or Brite23, both non-invasive and wearable technologies.

References to fNIRS EEG

Anwar AR, Muthalib M, Perrey S, Galka A, Granert O, Wolff S, Heute U, Deuschl G, Raeth-jen J, Muthuraman M.
Effective Connectivity of Cortical Sensorimotor Networks During Finger Movement Tasks: A Simultaneous fNIRS, fMRI, EEG Study.
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Starstim fNIRS package

The Starstim fNIRS package includes Neuroelectrics® StarStim (tCS and EEG) and Artinis OctaMon, both non-invasive and wearable technologies.
It allows clinicians and researchers to measure resting-state and task-related prefrontal corti-cal activity (EEG) and/or hemodynamics (fNIRS) before, during and after transcranial electrical stimulation in real world settings. In addition to the equipment provided, the Starstim NIRS package includes online assistance by Silverline Research Services (SRS) on how to integrate these two state-of-the-art devices or to tailor the Starstim with another neuroimaging device specifically according to your research or clinical needs. SRS expertise can also provide specialised online or on-site training (1-5 days) to integrate tCS with neuroimaging (EEG and fNIRS) through every step as well as other neurophysiological techniques (TMS, fMRI) and applications (cognition, motor control, sports and virtual reality).

NIRS FUNCTIONALITY
Number of channels: 8
Sampling rate: 50 SPS
Light source LED's: 8x2 wavelengths
Wavelength: 760, 850 nm
Optode distance: 35 mm

EEG FUNCTIONALITY
Number of channels: 8
Sampling rate: 500 SPS
Bandwidth: 0 to 125 Hz (DC coupled)
Resolution: 24 bits – 0,05 μV resolution
Noise: < 1 μV RMS
CMRR: -115 dB
Input impedance: 1 GΩ

STIMULATION FUNCTIONALITY
Number of channels: 8
Sampling rate: 1000 SPS
Frequency range: 0 to 250 Hz (tACS) and 0 to 500 Hz (tRNS)
Stimulation types: tDCS, tACS and tRNS
Maximum current per channel: ± 2mA
Current accuracy: 1%
Current resolution: 1 μA
Voltage: ± 15 V per electrode (30 V potential difference)

Get a quote
Contact us at:
askforinfo@artinis.com

Starstim fNIRS package

What's in the box?
1 x NeuroElectrics Starstim
1 x OctaMon or Brite23
Specialized training by Silverline Research Services (SRS)

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