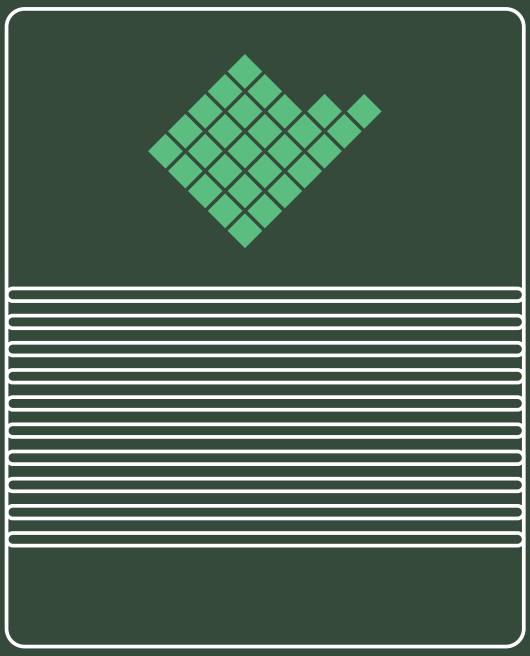
elements

Enabling technologies for Life Science



e16

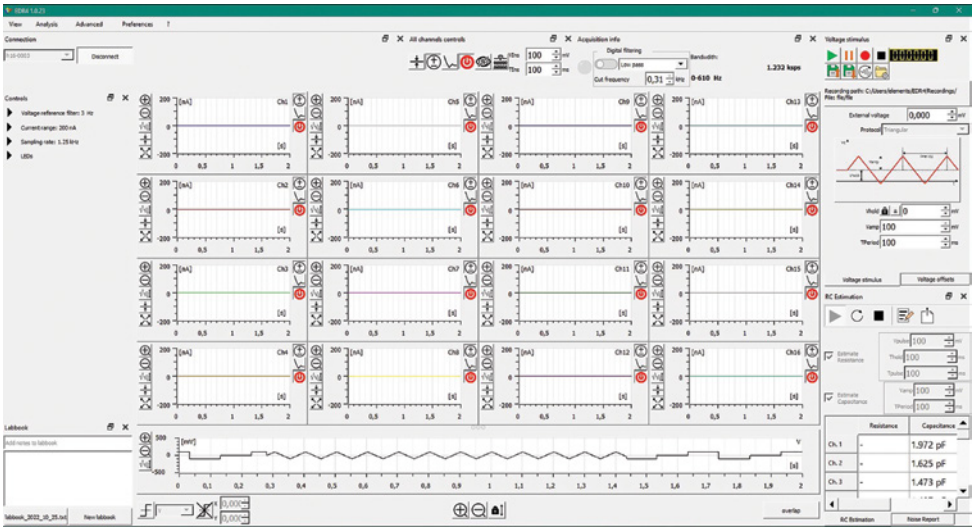
Versatile 16 channels amplifier for low-noise current measurements. Suitable for lipid bilayer experiments and multichannel electrochemistry, with high precision and reliability. Designed for easy integration with in-house measurement setups (e.g. sensor, flowcells) or with customized options to meet your specific needs.

Technical specifications

Open Input (RMS) noise: 0.41 pA rms @ 10kHz; 3.8 pA rms @ 100kHz
Current ranges: ±200pA (Gain 2.25GΩ); ±2nA (Gain 225MΩ); ±20nA (Gain 22.5MΩ); ±200nA (Gain 2.25MΩ)
Voltage pulse generator range: ±500 mV
Max available bandwidth: 100 kHz
Max sampling rate: 200 ksps
Each channel has an individually configurable holding potential
Auto electrodes voltage offset fine compensation
Digital Trigger Output
USB 2.0 Data Interface - 5Vdc Power Supply
Size & Weight: 20 x 75 x 105 mm , 250 g

EDR4, Elements Data Reader Free Software Interface

EDR4 software interface enables easy control of the amplifier, showing and saving data in real time. Input current ranges, bandwidth, voltage stimuli and electrode offset compensation can all be easily selected and modified.



Features

- Customizable user-friendly Windows-format interface
- Real-time display of voltage and current digitized data
- Parametric voltage protocols editor
- Continuous Capacitance, Resistance and rms noise monitoring during the recording
- Real-time data analysis (current histograms, dwell and inter-event time histograms, I/V graph, FFT etc.)
- Digital LabBook
- Data output saving formats: .dat and .abf
- Data saved from the selected channels
- Application Programming Interface (API) available

Design your setup with our PCB

A PCB is provided to connect the amplifier to your experimental setup (e.g. flowcell, sensor etc.). In addition, a custom-designed interposer can be provided to interface with your setup. This flexibility ensures a highly personalized experience, adapting to diverse experimental requirements, while keeping high quality multichannel signal acquisition with very low noise.

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