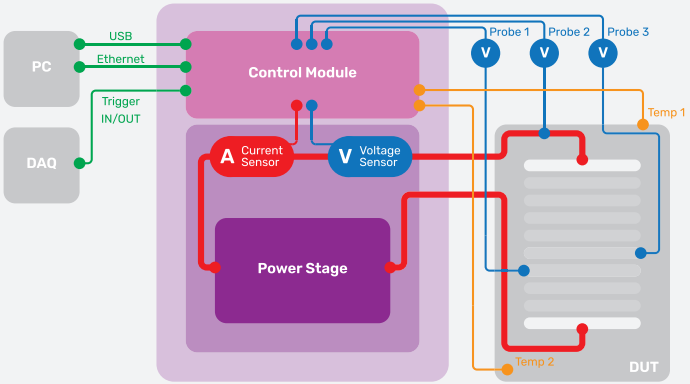
Block Schema Ultimate Line



Deployment Scenarios

Fuel Cell & Electrolyzer Characterization

Perform precise polarization curves and continuous load profiling. Validate the efficiency, degradation, and performance of single cells and short stacks under dynamic, real-world operating conditions.

Battery Lifecycle & Degradation Studies

Execute long-term charge/discharge routines combined with periodic impedance sweeps. Accurately track State of Health (SoH) and pinpoint internal resistance changes over thousands of cycles.

Catalyst & Material Benchmarking

Evaluate novel membranes and electrode materials. Run high-resolution Cyclic Voltammetry (CV) and Chronoamperometry to analyze reaction kinetics and stability before initiating costly scale-ups.

Automated Test Rig Integration

Deploy as a reliable execution engine in complex, 24/7 setups. Utilize native TCP/IP control and Python scripts to fully automate multi-step electrochemical procedures without manual supervision.

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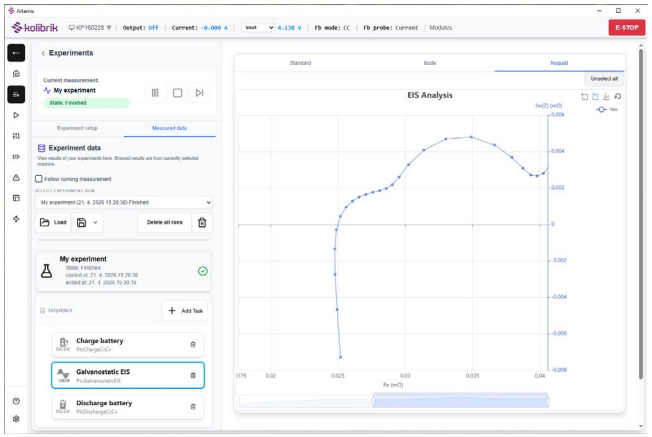
Artemis

Kolibrik Measurement & Control App

- Get a full control over testing fuel cells, batteries, electrolyzers, and supercapacitors with clear and intuitive graphical interface.
- Easily set up experiments without writing a single line of code.



Effortless Method Sequencing

Design complex experiments by combining multiple electrochemical methods into a single sequence.

Intuitive User Interface

Navigate your experiments with ease using a clear experiment tree, action buttons, and real-time data visualization.

Flexible Data Management

Save and load experiment settings and data effortlessly, with options to export your results to CSV for convenient analysis.

Precise Control & Customization

Each method and step allows for individual device settings, ensuring precise control over your measurement parameters.

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Potentiostat/ Galvanostat

Designed for hydrogen

- High-Current Potentiostat with EIS
- Up to ±100 A and ±10 V

www.kolibrik.net

Potentiostat Ultimate Line

- MegaEIS™ Architecture in 4 Quadrants. High-Speed 3-Channel Acquisition.
- Built for the most complex scale-up R&D. Brings the true parallel processing of our MegaEIS™ platform into an all-in-one potentiostat. Features 1.25 Msps high-speed sampling, delivering advanced diagnostics without multiplexing.

Ultimate Line Exclusives

3 independent voltage channels,
Up to 1.25 Msps acquisition,
Ethernet conectivity,
Dual-channel thermal input,
Trigger IN/OUT

Advanced Diagnostic Methods

Fast high- and multi-frequency resistance,
High-redolved square pulses, PRBS, Current interrupt,
High-speed EIS during charge/discharge process,
Advanced battery testing protocols

Potentiostat Core Line

- High-Current All-in-One Architecture. Stable Data at Scale.
- Engineered for robust performance and continuous high-power testing. This heavy-duty, all-in-one hardware features an integrated display and ensures uncompromised signal stability for demanding R&D setups.

Potentiostat Essential Line

- Everyday Lab Efficiency. Designed to Fit Your Budget.
- Designed to maximize your research budget. This highly affordable solution eliminates standalone hardware overhead while delivering the exact same 4-quadrant operation, full-range EIS, and software for routine lab testing.

Kolibrik Potentiostats Key Features

High Current Measurement

Potentiostat/Galvanostat provides wide measurement range up to ±100 A and ±10 V.

Excellent Accuracy

High accuracy and precision in both potentiostatic and galvanostatic mode.

Designed for EIS 1 mHz ... 100 kHz

EIS analysis of fuel cells, electrolyzers, and batteries, advanced measuring methods.

True 4-Quadrant Operation

Acting as both a power source and an electronic load, enabling full-cycle testing.

Model	Voltage	Current	Cooling
Ultimate Line			
PTCu-1020E	-5 V ... +10 V	±20 A	Air
PTCu-0550E	±5 V	±50 A	Air
PTCu-1050EW	±10 V	±50 A	Water*)
PTCu-05100EW	±5 V	±100 A	Water*)
PTCu-10100EW	-2 V ... +10 V	±100 A	Water*)
Core Line			
PTC-0550E	±5 V	±50 A	Air
PTC-1050EW	±10 V	±50 A	Water*)
PTC-05100EW	±5 V	±100 A	Water*)
PTC-10100EW	-2 V ... +10 V	±100 A	Water*)
Essential Line			
PTCe-0520E	±5 V	±20 A	Air
PTCe-1020E	-5 V ... +10 V	±20 A	Air

*) Water cooling via standard lab chiller and fittings.