Datasheet

kolibrik

Potentiostat/ Galvanostat

For Fuel Cell Stacks, Electrolyzers and Batteries
EIS Acquisition

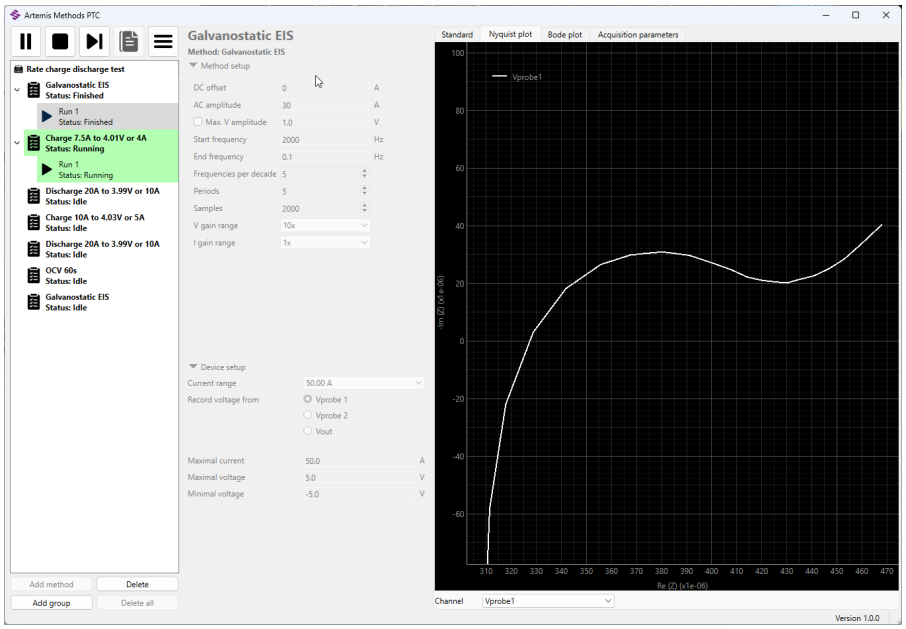
Potentiostat Essential

PTCe-0520E | PTCe-1020E

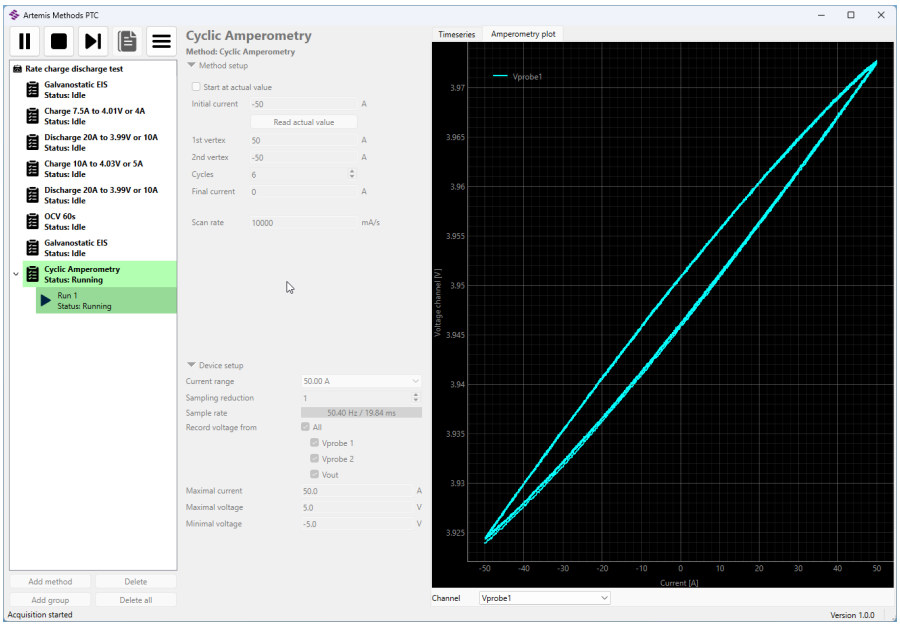
Applications

Potentiostat Essential Line is designed for high-power electrochemical applications, including a wide range of fuel cells, electrolyzers, and advanced battery technologies. Integrated EIS provides critical diagnostics for applied R&D, manufacturing, and quality control.

All models are fully driven by Artemis measurement software, ensuring seamless PC-controlled workflows. This enables advanced cycling, custom method sequencing, and full scripting to automate complex experimental procedures.



Artemis – Kolibrik Measurement Software – EIS



Artemis – Kolibrik Measurement Software – Cyclic Amperometry

Technical Parameters

	PTCe-0520E	PTCe-1020E
Power supply	110 … 240 V AC / 50 … 60 Hz	
Dimensions / Weight	19" rack-mount, 4U; 440 mm (W) × 177 mm (H) × 358 mm (D) / 15 kg	
Cooling	Air	Air
Protection rating	IP20	
Electrometer Input voltage range	-10 V … +10 V	
Compliance / Output voltage	-5 V … +5 V	-5 V … +10 V
Compliance / Output current	-20 A … +20 A	
Max. internal power dissipation	200 W	300 W
Current ranges	20 mA, 200 mA, 2 A, 20 A	
Sampling	14-bit ADCs, up to 20 Msps for EIS measurements, max. 2000 samples per single frequency	
Measurement resolution	0.001% of selected range for ≤ 1 ksps sampling	
Accuracy	Voltage: ≤ 0.1% of range + 0.1% of reading Current: ≤ 0.1% of range + 0.5% of reading	
Acquisition methods	Constant V, I, Open circuit, Manual control, Linear Sweeps, Cyclic Voltammetry, Cyclic Amperometry, Electrochemical Impedance Spectroscopy (EIS), Chronoamperometry, Chronopotentiometry, Double Step Chronoamperometry, Double Step Chronopotentiometry, Current Interrupt, Square Pulse Potentiometry, Square Pulse Amperometry, Battery Charge and Discharge, Custom experiment sequences, Python scripting	
EIS frequency	1 mHz ... 100 kHz	
EIS amplitude	1 … 1000 mV, 0 … 10 A up to 5 A for < 1 kHz up to 1 A for < 10 kHz	
PC connection	USB 2.0	
Software	Artemis Software for MS Windows, TCP Server, NI LabVIEW drivers, Python library and examples	

Rear View

PTCe-0520E

PTCe-1020E

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