

# Potentiostat/ Galvanostat

For Fuel Cell Stacks, Electrolyzers and Batteries  
EIS Acquisition

Potentiostat **Essential**



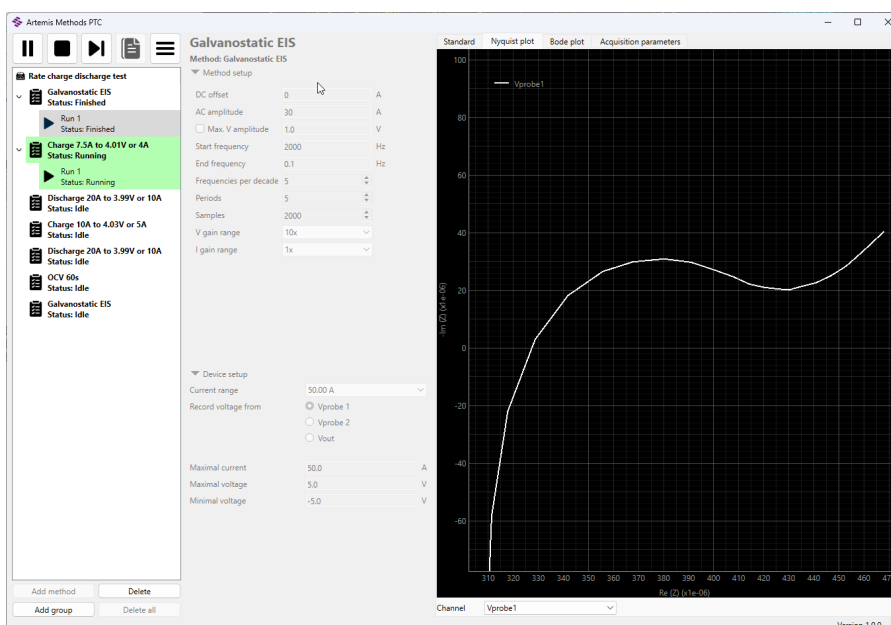
PTCe-0520E | PTCe-1020E



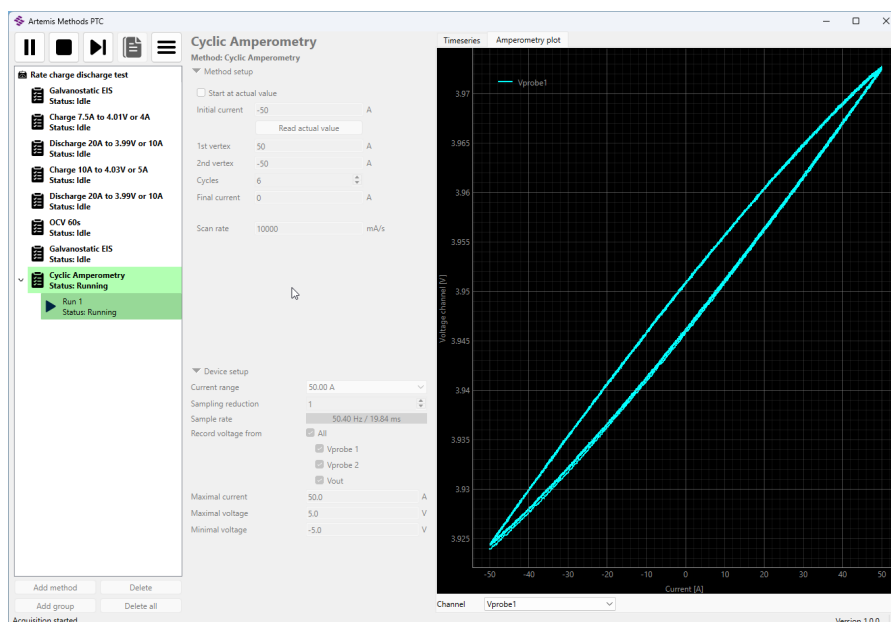
# Applications

**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 – Kolibrík Measurement Software – EIS



Artemis – Kolibrík Measurement Software – Cyclic Amperometry

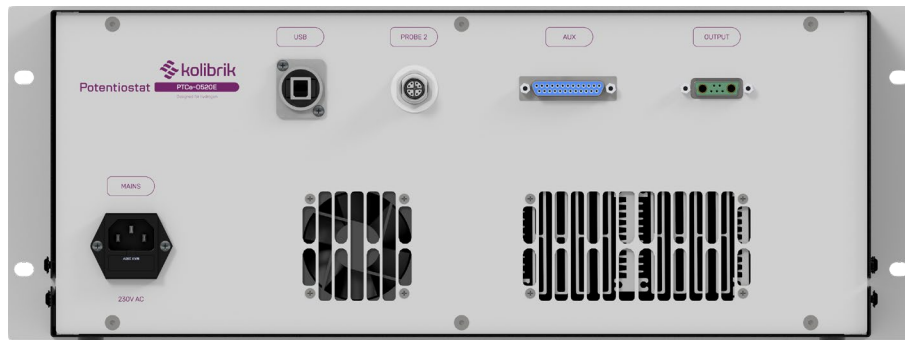


## Technical Parameters

	PTCe-0520E	PTCe-1020E
<b>Power supply</b>	110 ... 240 V AC / 50 ... 60 Hz	
<b>Dimensions / Weight</b>	19" rack-mount, 4U; 440 mm (W) × 177 mm (H) × 358 mm (D) / 15 kg	
<b>Cooling</b>	Air	Air
<b>Protection rating</b>	IP20	
<b>Electrometer Input voltage range</b>	-10 V ... +10 V	
<b>Compliance / Output voltage</b>	-5 V ... +5 V	-5 V ... +10 V
<b>Compliance / Output current</b>	-20 A ... +20 A	
<b>Max. internal power dissipation</b>	200 W	300 W
<b>Current ranges</b>	20 mA, 200 mA, 2 A, 20 A	
<b>Sampling</b>	14-bit ADCs, up to 20 Msp/s for EIS measurements, max. 2000 samples per single frequency	
<b>Measurement resolution</b>	0.001% of selected range for ≤ 1 ksp/s sampling	
<b>Accuracy</b>	Voltage: ≤ 0.1% of range + 0.1% of reading Current: ≤ 0.1% of range + 0.5% of reading	
<b>Acquisition methods</b>	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	
<b>EIS frequency</b>	1 mHz ... 100 kHz, limited use up to 1 MHz	
<b>EIS amplitude</b>	1 ... 1000 mV, up to 10 A, for < 1 kHz	
<b>PC connection</b>	USB 2.0	
<b>Software</b>	Artemis Software for MS Windows, TCP Server, NI LabVIEW drivers, Python library and examples	



## Rear View



**PTCe-0520E**



**PTCe-1020E**

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