

Potentiostat

PTC-0520E

High-power H2FC potentiostat

Version 1.4
2021-03-15



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Quick summary

❖ Potentiostat/Galvanostat	± 5 V, ± 20 A
❖ Max internal power dissipation	200 W
❖ 4 current ranges	20 mA, 200 mA, 2 A, 20 A
❖ Impedance spectroscopy	1 mHz .. 1 MHz
❖ Cooling	Air

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Technical Parameters

Power supply	110..240V AC / 50..60 Hz
Dimensions	19" rack cabinet, 4U height
Cooling	Air
Protection rating	IP20
Electrometer Input voltage range	-10 V ... +10 V
Compliance / Output voltage	-5 V ... +5 V
Compliance / Output current	-20 A ... +20 A
Current ranges	4 current ranges (20 mA, 200 mA, 2 A, 20 A)
Sampling	24-bit ADCs, 1 ksps internal, 50 sps filtered sampling 14-bit ADCs, up to 20 Msps for EIS measurements
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 chronoamperometry, chronopotentiometry linear sweeps, I/V characteristics cyclic voltammetry, cyclic amperometry pulse voltammetry - differential, square, normal impedance spectroscopy (EIS) programmable sequences of all available methods
EIS frequency	1 mHz .. 1 MHz
EIS amplitude	1 .. 1000 mV, up to 10 A for < 1 kHz
Connection	USB 2.0
Software	Software for MS Windows, TCP Server, NI LabVIEW drivers