

Potentiostat

PTC-0520E

High-power H2FC potentiostat

Version 1.3
2020-01-28



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Quick summary

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|----------------------------------|--------------------------|
| ❖ Potentiostat/Galvanostat | ± 5 V, ± 20 A |
| ❖ Max internal power dissipation | 200 W |
| ❖ Current ranges | 20 mA .. 20 A (4 ranges) |
| ❖ 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 .. 20 A)
Sampling	24-bit ADCs, 3 ksps internal, 50 sps filtered sampling 14-bit ADCs, up to 20 Msps for EIS measurements
Measurement resolution	0.001 % of selected range for ≤ 3 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 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