

Potentiostat

PTC-1050EW

High-power H2FC potentiostat

Document version 1.0
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Quick summary

- ❖ Potentiostat/Galvanostat ± 10 V, ± 50 A
- ❖ Max internal power dissipation 1000 W
- ❖ 4 current ranges 500 mA, 5 A, 20 A, 50 A
- ❖ Impedance spectroscopy 1 mHz .. 100 kHz
- ❖ Cooling Water

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Technical Parameters

Power supply	110..240V AC / 50..60 Hz
Dimensions	19" rack cabinet, 4U height
Cooling	Water
Protection rating	IP20
Electrometer Input voltage range	-10 V ... +10 V
Compliance / Output voltage	-10 V ... +10 V
Compliance / Output current	-50 A ... +50 A
Current ranges	4 current ranges (500 mA, 5 A, 20 A, 50 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 .. 100 kHz, limited use up to 1 MHz
EIS amplitude	1 .. 1000 mV, up to 25 A for < 1 kHz
PC connection	USB 2.0
Software	Software for MS Windows, TCP Server, NI LabVIEW drivers