

# Potentiostat

## PTC-05100EW

High-power H2FC potentiostat

Version 1.2  
2021-03-15



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## Quick summary

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

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## PTC-05100EW



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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	-5 V ... +5 V
Compliance / Output current	-100 A ... +100 A
Current ranges	4 current ranges (500 mA, 5 A, 20 A, 100 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 $\leq 1$ ksps sampling
Accuracy	Voltage $\leq 0.1$ % of range + 0.1 % of reading Current $\leq 0.1$ % 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 50 A for $< 1$ kHz
PC connection	USB 2.0
Software	Software for MS Windows, TCP Server, NI LabVIEW drivers