



**Princeton  
Applied  
Research**

**AMETEK®**

# PARSTAT-AT

ADVANCED  
Technology

ACCELERATED  
Discovery



## PMC-1000 AT

Powered By



## PRECISION MEETS AUTONOMY



Ethernet  
Interface



122 aA Low  
Current-Interface



3-slot  
Chassis



Direct-To-Disk  
Data Storage



8-wire Cell  
Connections



Fully  
Autonomous  
Operation



24-bit  
Resolution  
150 nV / 30 fA



Thermistor  
Input

## PMC-1000 AT Specifications

<b>System</b>	Architecture	3-slot Ethernet chassis (1-slot per PMC-1000-AT or booster)
	Cell Connections	CE, WE, RE, SE plus 2x differential auxiliary inputs (8-wire)
<b>Applied Voltage</b>	Polarization / compliance	$\pm 10$ V / $\pm 12$ V
	Voltage Scan / Pulse	Smooth scan, staircase, fast pulse
<b>Applied Current</b>	Maximum current	$\pm 2$ A (up to 20 A with internal booster, 30 A external booster)
	Current Scan / Pulse	Smooth scan, staircase, fast pulse
<b>Voltage Inputs</b>	Voltage Inputs	RE / SE, Aux-1, Aux-2 (synchronous)
	Ranges (maximum resolution)	10 V, 1 V (24-bit ADC 150 nV)
<b>Current Input</b>	Ranges (maximum resolution)	10 ranges , 2 A - 2 nA (24-bit ADC 30 fA)
<b>EIS</b>	Inputs	Main (RE/SE), Aux-1, Aux-2 (anode / cathode EIS)
	Frequency range	10 $\mu$ Hz to 1 MHz
<b>Analog / Digital I/O</b>	Temperature input	Thermistor
	Analog I/O	2x Analog inputs, 2x analog outputs
	Digital I/O	1x Digital inputs, 4x digital outputs – booster control, accessory
<b>Options</b>	Current Booster	Up to 2 boosters +6 V / -1 V, $\pm 10$ A ( $\pm 20$ A in parallel)
	Low Current Interface (LCI)	122 nA resolution
<b>Aspire Software</b>	Techniques - Energy, Electrochemistry, Corrosion	Including: CC, CV, CP, CR, LPR, Tafel, Linear / Staircase Voltammetry, Cyclic Voltammetry, Fast Pulse, SWV, DPV, PEIS, GEIS, Arbitrary Waveform, Ohmic Drop, IR compensation, Loops, Variables
	3rd Party Accessories	Integrated thermal chambers and data loggers

