µStat 8000P Multi Potentiostat

01 Ref. STAT8000P







Following the format of our multipotentiostats with a size of only 22x20x7 cm, this equipment includes 8 channels that can act at the same time as 8 independent potentiostats; it also includes one multichannel that can act as a potentiostat where up to 8 working electrodes share an auxiliary and a reference electrode.

With µStat 8000P users can perform up to 8 different electrochemical techniques at the same time; or carry out the study of one technique's parameter in just one step by applying the same electrochemical technique in several channels but selecting different values for the parameter under study. These are just examples of the enormous capabilities that this instrument offers.

µStat 8000P can be applied for Voltammetric or Amperometric measurements, including 12 electroanalytical techniques. In addition, µStat 8000P owners can later upgrade their instrument to a µStat 8000 by just purchasing an extension. This self-upgrade does not require any hardware modification, but it is implemented by means of a Galvanostat software update kit.

This equipment is Li-ion Battery powered (DC charger adaptor also compatible), and can be easily connected to a PC via USB or through Wireless connection.

µStat 8000P is controlled by the included software "DropView 8400" which allows plotting of the measurements and performing the analysis of results. DropView software provides powerful functions such as experimental control, graphs or file handling, among others.

Available techniques:

POTENTIOSTAT

Voltammetry

LSV Linear Sweep Voltammetry CV Cyclic Voltammetry

SWV Square Wave Voltammetry DPV Differential Pulse Voltammetry NPV Normal Pulse Voltammetry

NDPV Differential Normal Pulse Voltammetry **ACV** AC Voltammetry (only EC mode)

Amperometry

Amperometric Detection AD **ZRA** Zero Resistance Amperometry FA Fast Amperometry ($t_{int} < 0.1 s$) PAD Pulsed Amperometric Detection

COUL Coulometric Detection

Instrument Specifications			
Power	Li-ion Battery (6150 mAh) USB DC charger adaptor compatible (5 V, 15 W)		
PC interface	Wireless connection USB		
Operating modes	8x 1 Channel Potentiostat 1x 8 Channel Potentiostat		
DC-Potential range	±4 V		
Current ranges (potentiostat)	± 1 nA to ± 100 mA (9 ranges)		
Maximum measurable current	±80 mA		
Potential ranges (galvanostat)	±100 mV, ±1 V (2 ranges)		
Applied Potential Resolution	1 mV		
Measured Current Resolution	0.025 % of current range (1 pA on lowest current range)		
Potential Accuracy	±0.2 %		
Current Accuracy	\leq 0.5 % of current range at 100 nA to 1 mA \leq 1 % of current range at 10 mA to 100 mA		
External inputs/outputs	 5 Digital Input/Output pins [PIO 1, PIO 2, PIO 3, PIO 4, PIO 5] 3 Analog Inputs multiplexing PIO 1, PIO 2, PIO 3 2 Analog Outputs (configurable I-out or E-out) 		
Indicators	LCD display in front panel		
Dimensions	22.2 cm x 20.5 cm x 7.5 cm (L x W x H)		
Weight	1.6 kg		

Control Specifications				
General Pretreatment	Conditioning stage duration: Deposition stage duration: Equilibration stage duration:	0 – 1300 s 0 – 1300 s 0 – 1300 s		
General Parameters	Begin, End, Base, Vertex potentials: Step potential: Pulse potential: Scan rate:	-4 V to +4 V 1 mV to 500 mV 1 mV to 250 mV 1 ms up to 1.3 s per step		
Specific Parameters	SWV	Frequency: Amplitude:	1 Hz to 400 Hz 1 mV to 250 mV	
	DPV, NPV, NDP	Modulation time: Pulse time:	1 ms to 1300 ms 1 ms to 1300 ms	
	ACV	Frequency: Amplitude:	2 Hz to 250 Hz 5 mV to 250 mV (RMS)	
	Chrono. Methods (AD, ZRA, COUL)	Interval time: Run time:	0.1 s to 1300 s Hours (65000 points)	
	Fast Chrono. Methods (FA)	Interval time: Run time:	1 ms to 1300 ms Hours (65000 points)	
	PAD	Pulse time: Interval time: Run time:	1 ms to 1300 ms 10 ms to 1300 ms Hours (65000 points)	

Specifications are subject to change without previous notice

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