µStat 4000 Multi Potentiostat/Galvanostat

Ref. STAT4000

DropSens is proud to announce the launch of the **NEW *µStat 4000***.

Our brand new instrument, of only 22x20x7 cm, includes **4 channels** that can act at the same time as **4 independent potentiostats/galvanostats**; it also includes **one multichannel** that can act as a potentiostat where up to 4 working electrodes share an auxiliary and a reference electrode.

With ***µStat 4000*** users can perform up to **4 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 our instrument offers.

µStat 4000 can be applied for **Voltammetric**, **Amperometric** or **Potentiometric** measurements, including **18 electroanalytical techniques**.

The **NEW portable** Multi Potentiostat/Galvanostat is **Li-ion Battery powered** (DC charger adaptor also compatible), and can be easily connected to a PC via USB or **Bluetooth®**.

µStat 4000 is controlled by the powerful **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

Amperometry

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

GALVANOSTAT

LSP Linear Sweep Potentiometry
CP Cyclic Potentiometry
PD Potentiometric Detection (galvanostatic)
FP Fast Potentiometry (t_{int} < 0.1s)
ZCP Zero Current Potentiometry
PSAG Potentiometric Stripping Analysis (galvanostatic)
PSAF Potentiometric Stripping Analysis (faradaic)

Parque Tecnológico de Asturias - Edif. CEEI. 33428 LLanera (Asturias). Spain
(+34) 985 27 76 85 - info@dropsens.com - www.dropsens.com

µStat 4000 Multi Potentiostat/Galvanostat

Ref. STAT4000

Instrument Specifications

Power	Li-ion Battery (6150 mAh) USB DC charger adaptor compatible (5 V, 15 W)
PC interface	Bluetooth® USB
Operating modes	4x 1 Channel Potentiostat/Galvanostat 1x 4 Channel Potentiostat
DC-Potential range	±4.096 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)
Rise time	20 µs
Applied Potential Resolution:	1 mV
Measured Current Resolution	0.025 % of current range (1 pA on lowest current range)
Applied Current Resolution	0.1 % of current output range
Measured Potential Resolution	0.012 % of potential range
Potential Accuracy	±0.2 %
Current Accuracy	≤0.5 % of current range at 100 nA to 1 mA ≤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:	0 – 1300 s	
	Deposition stage duration:	0 – 1300 s	
	Equilibration stage duration:	0 – 1300 s	
General Parameters	Begin, End, Base, Vertex potentials:	-4.096 V to +4.096 V	
	Step potential:	1 mV to 500 mV	
	Pulse potential:	1 mV to 250 mV	
	Scan rate:	1 ms up to 1.3 s per step	
Specific Parameters	SWV	Frequency:	1 Hz to 400 Hz
		Amplitude:	1 mV to 250 mV
	DPV, NPV, NDP	Modulation time:	1 ms to 1300 ms
		Pulse time:	1 ms to 1300 ms
	ACV	Frequency:	2 Hz to 250 Hz
		Amplitude:	5 mV to 250 mV (RMS)
	Chrono. Methods (AD, PD, ZCP, ZRA)	Interval time:	0.1 s to 1300 s
		Run time:	Hours (65000 points)
	Fast Chrono. Methods (FA, FP)	Interval time:	1 ms to 1300 ms
		Run time:	Hours (65000 points)
	PAD	Pulse time:	1 ms to 1300 ms
		Interval time:	10 ms to 1300 ms
		Run time:	Hours (65000 points)
	PSA	Potential limit:	±2.048 V

Specifications are subject to change without previous notice

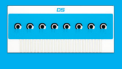
Related products

CABSTAT1

CABSTATMULTI

CAST

CAST8X



8X110

Full Catalogue

Contact Form

Parque Tecnológico de Asturias - Edif. CEEI. 33428 LLanera (Asturias). Spain
(+34) 985 27 76 85 - info@dropsens.com - www.dropsens.com