



Following the format of our multipotentiostats with a size of only 22x20x7 cm, includes **4 channels** that can act at the same time as **4 independent potentiostats**; 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 4000P** 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 new instrument offers.

**μStat 4000P** can be applied for **Voltammetric** or **Amperometric** measurements, including **12 electroanalytical techniques**. In addition, **μStat 4000P** owners can later upgrade their instrument to a **μStat 4000** 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 Multi Potentiostat is **Li-ion Battery powered** (DC charger adaptor also compatible), and can be easily connected to a PC via USB or **Bluetooth®**.

**μStat 4000P** 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
- 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	Bluetooth® USB
Operating modes	4x 1 Channel Potentiostat 1x 4 Channel Potentiostat
DC-Potential range	±4 V
Current ranges (potentiostat)	±1 nA to ±100 mA (9 ranges)
Maximum measurable current	±80 mA
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	≤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) LCD display in front panel
Indicators	
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 V to +4 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, ZRA, COUL)	Interval time:	0.1 s to 1300 s
		Run time:	Hours (65000 points)
	Fast Chrono. Methods (FA)	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)	

Specifications are subject to change without previous notice

### Related products



CABSTAT1



CABSTATMULTI



CAST



110



4W110

Full Catalogue



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