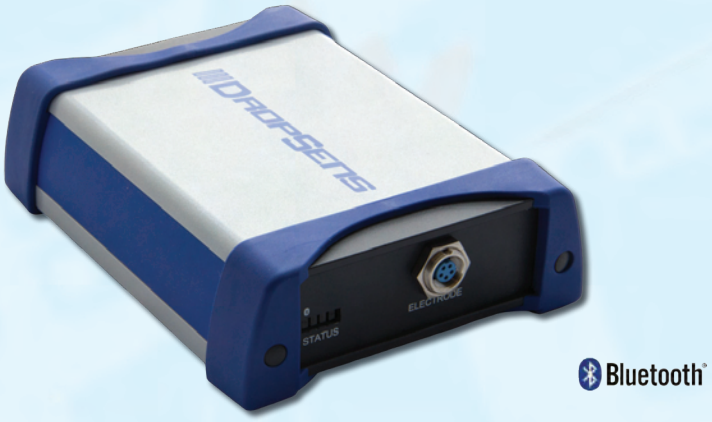
µStat 400 Bipotentiostat/Galvanostat

Ref. STAT400



µStat 400 is the **portable BiPotentiostat/Galvanostat** from *DropSens* that can be applied for **Voltammetric**, **Amperometric** or **Potentiometric** measurements, including **18 electroanalytical techniques**, and can be used with one- or two- working electrodes configuration.

The new portable bipotentiostat/galvanostat is **Li-ion Battery powered** (USB charger adapter compatible). It can be easily connected to a PC via USB, RS232 and **Bluetooth®**.

µStat 400 has eight current ranges: 1 nA to 10 mA, and Auto (the instrument automatically selects the optimal current range), with a **maximum measurable current of 40 mA**.

The supplied ***DropView 8400*** **software** for Windows is used to control the instrument and to plot the measurements and perform the analysis of results. ***DropView 8400*** **software** provides powerful functions such as:

- manual control of the experiment, for tailoring your electrochemical measurements
- plot overlay, peak integration, smoothing, subtraction, derivative curve, baseline fitting, etc
- script editor for programming specific work routines
- peripheral configuration (digital inputs/outputs) for synchronised operation with other devices
- 3D plotting of curves

Available techniques:

POTENTIOSTAT

Voltammetry

LSV Linear Sweep Voltammetry
CV Cyclic Voltammetry
SWV Square Wave Voltammetry
DPV Differential Pulse Voltammetry
NPV Normal Pulse Voltammetry
NDP 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)

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Instrument Specifications

Power	Li-ion Battery (1250 mAh) USB DC charger adaptor compatible (5 V)
PC interface	Bluetooth® / USB / RS232
Operating modes	BiPotentiostat, Potentiostat, Galvanostat
DC-Potential range	±4.096 V
Current ranges (potentiostat)	±1 nA to ±10 mA (8 ranges)
Maximum measurable current	±40 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 10 mA
External inputs/outputs	Iout, Eout 2 Analog inputs 1 Analog output 2 Digital input/outputs TX, RX, RTS signals for RS232 connection
LED indicators	Power, Status, Measuring, Bluetooth®
Dimensions	13.2 cm x 10.0 cm x 3.6 cm (L x W x H)
Weight	480 g

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


DSC


CAST


BICAST


110


C1110

Full Catalogue

Contact Form

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