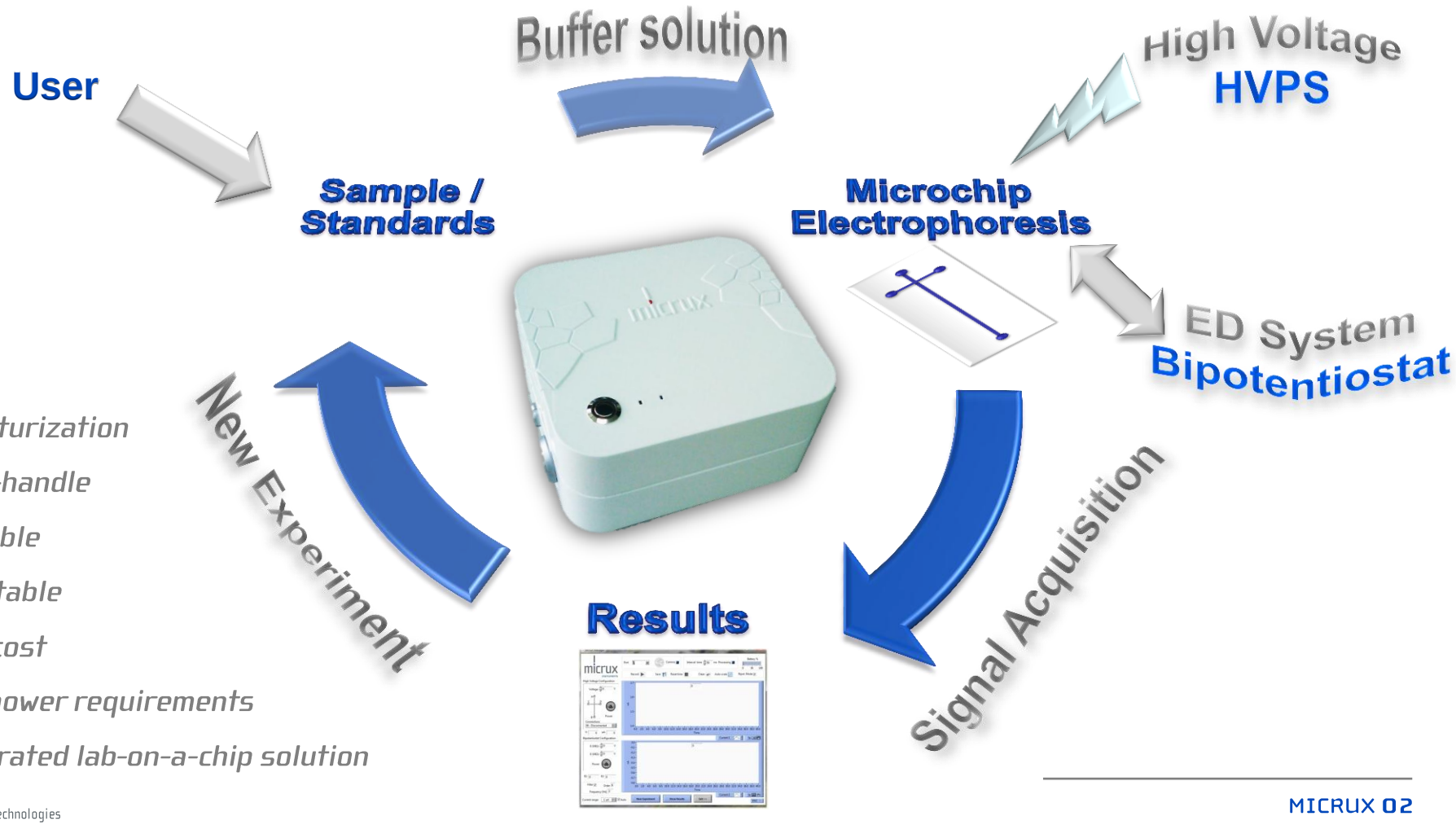
micrux
TECHNOLOGIES

MicruX® HVStat

empresa innovadora de base tecnológica
reconocida por ANCES
eibt

MicruX® HVStat

HVStat (*ref. HVSTAT2010*) combines in a compact and portable equipment a *high voltage power supply* and a *bipotentiostat* for dual amperometric detection.



Miniaturization

Easy-handle

Portable

Adaptable

Low-cost

Low power requirements

Integrated lab-on-a-chip solution

Technical specifications

- **Dimensions:** 165 x 150 x 85 mm *(L x W x H).*
- **Battery**-powered (LiPo – 3300 mAh).
- Control PC **software.**
- **Interfacing:** Serial RS232/ USB Adapter/ Bluetooth®.
- **LED indicators:** power, Bluetooth®, cable.

TECHNICAL FEATURES: High Voltage Power Supply

Power:	1 W
Channels/ Outputs:	1/ 4
Outputs polarity:	Positive/negative
Output voltage:	±3000 V
Max. output current:	0,34 mA
Output voltage tolerance:	±3 % typical
Ripple:	< 1%
Operating temperature:	-20ºC to +70ºC
Storage temperature:	-20ºC to +105ºC
Humidity:	20% to 85% RH

TECHNICAL FEATURES: Bipotentiostat

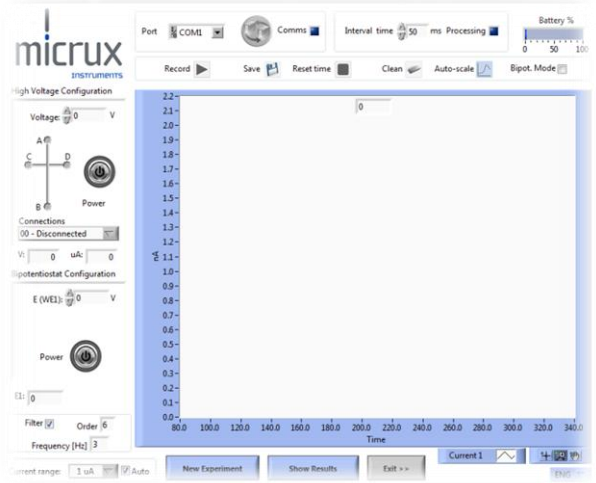
DC-potential range:	± 2,00 V
Voltage reference:	4,00 V
DC-potential resolution:	1 mV
DC-offset error:	± 1 mV
Accuracy:	≤ 0,1 %
Current ranges:	1 nA to 1 µA (4 ranges)
Maximum current:	± 2 µA
Current resolution:	0,1 % of current range / 1 pA on lowest current range
Electrochemical techniques:	DC amperometric detection (AD) Pulsed amperometric detection (PAD)
Run time:	1 s - ∞ (Experiments 1 s – 1000 h)
Interval time:	10 ms - 1000 s (RS232/ USB)
Pulse time:	5 ms - 1000 s (RS232/ USB)
Maximum number of points:	No limited (depending of computer memory)

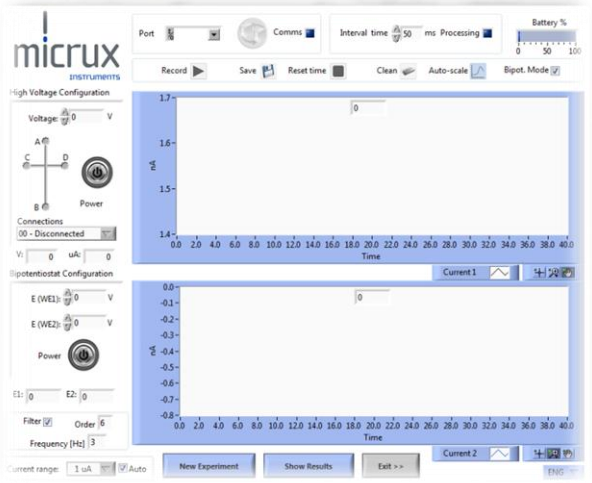
Specifications are subject to change without previous notice

MicruX® Manager

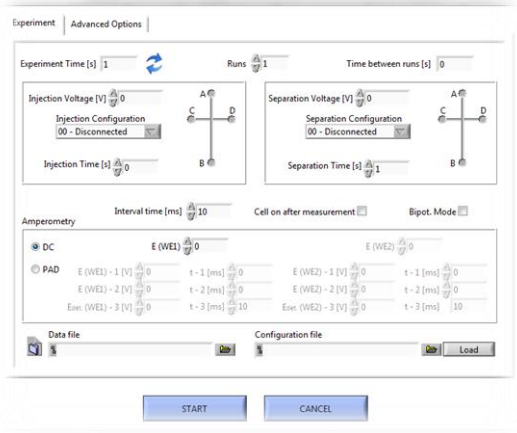
MicruX Manager is a *graphical user interface (GUI)* to control the high voltage power supply and bipotentiostat of HVStat.

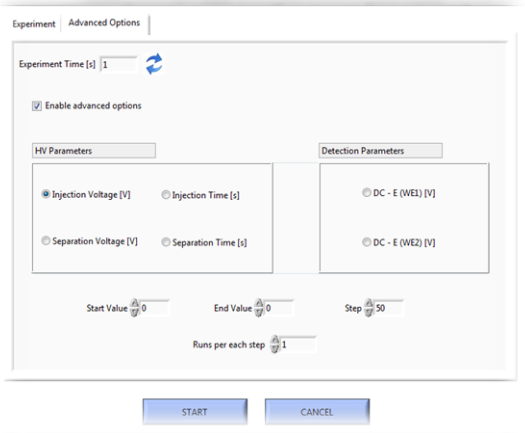
MicruX Manager main interface for single- and dual-mode detection



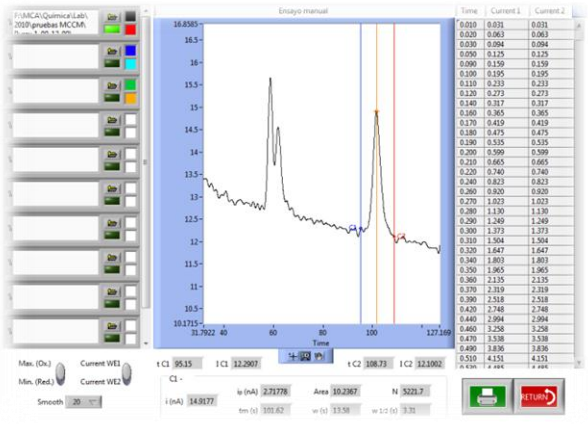


MicruX Manager experiment window: basic and advanced options





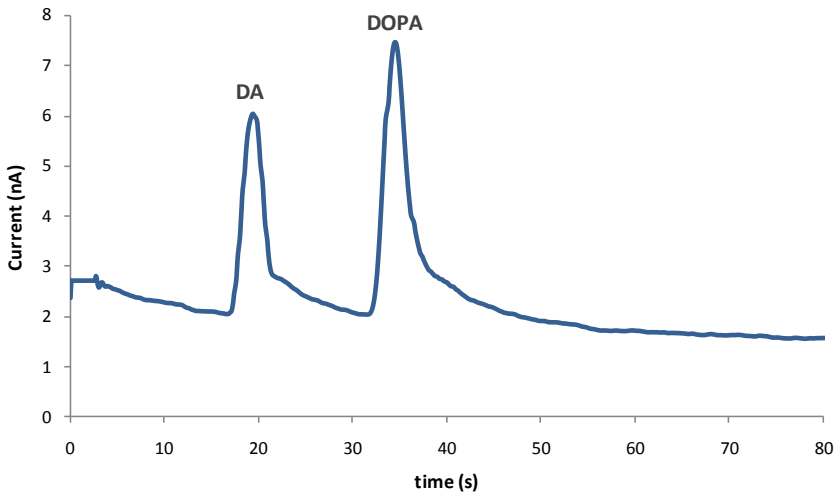
MicruX Manager results window



MicruX® HVStat

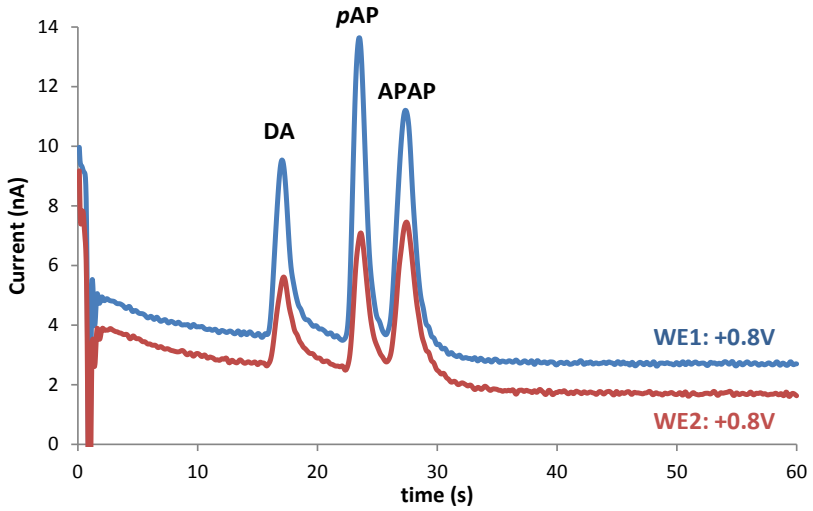
Separation of neurotransmitters and phenolic compounds performed using MicruX® HVStat instrument and different microchips electrophoresis.

:: MCE-SU8-Pt001T



Electropherogram for the separation of 100 µM DA and 500 µM DOPA using a SU-8/pyrex single-channel microchip. Conditions: Running buffer: 25 mM MES-His pH = 6.0; V_{inj} = +750 V for 5s, V_{sep} = +1000 V, E_d = +0.75 V (vs. Pt).

:: MCE-SU8-IDA-Pt005T



Electropherograms for the separation of 100 µM DA, 100 µM pAP and 250 µM APAP using a SU-8/pyrex single-channel microchip with an interdigitated array microelectrode. Conditions: Running buffer: 20 mM MES pH = 6.0; V_{inj} = +750 V for 3s, V_{sep} = +1000 V.

micrux
TECHNOLOGIES

Severo Ochoa Building · Floor -1 – Room 4 & 6
Julián Clavería s/n · Oviedo (Asturias) · SPAIN

Phone/FAX: +34 984151019

E-mail: info@micruxfluidic.com
Web: www.micruxfluidic.com

empresa innovadora de base tecnológica
reconocida por ANCES
eibt