

OGF⁺ 500EIS
OrigaFlex range

electrochem
OrigaLys



UNIVERSIDAD
DE LOS LLANOS

Potentiostat - Galvanostat - EIS
 ± 5 nA to ± 500 mA / ± 15 V / ± 20 V 10 μ Hz to 5 MHz

MORE THAN 75 YEARS OF EXPERIENCE IN ELECTROCHEMISTRY

HOW IT WORKS

To supply the system, there are two possibilities, depending on your needs...

DRIVE UNIT - MULTI-CHANNEL CONFIGURATION

Power supply / Control of channels / Built-in dummy cell

OGF⁺DRV



OGF⁺DRV



Communication

TTL

RS232

ON OFF



New!

Example :



OGF⁺500 + OGF⁺01A + OrigaMux + 3 x OGF⁺05A

Control of external instruments:

- Rotating electrode (RDE)
- Magnetic agitator
- Thermostat bath
- Solar simulator
- Climate chamber
- Etc.

POWER SUPPLY - FOR SINGLE-CHANNEL



OGF⁺PWR

- Power supply
- For only one channel



One channel 500 mA
=
Pack OGF500

Check out our
difference OGF packs:





POTENTIOSTAT GALVANOSTAT IMPEDANCE T°C PROBE BATTERY HOLDER

±500 mA / ±20 V

Potential ranges: **± 3 V / ± 6 V / ± 15 V**

ZRA method

TTL Communication

**Integrated EIS:
5 MHz - 10 µHz**

OrigaMaster 5

**Licence free software
EASY TO USE**

- Simultaneous measurements on different channels can be synchronized.
- Built-in EIS: 10 µHz-5 MHz
- Can be addressed directly to a PC, via USB and so controlled by OrigaMaster.
- See the Status or the free potential on the bottom screen
- Up to 10 Channels OGF500 with 1 Drive Unit & Dummy Cell



Batteries



Corrosion

OPTIONAL ITEMS

OrigaTrod Kit: Rotating Disk Electrode (RDE) and its speed controller (OrigaBox).

OrigaMp: Low current probe, up to 1 pA.

OrigaDiff: 2nd voltage measurement.

OrigaMix: Magnetic stirrer and its speed controller (OrigaBox).

OrigaLine: Static electrode, glass electrodes, tips, sample holder, electrochemical cell, etc.

Battery Cell Holder



MAIN TECHNICAL SPECIFICATIONS

Electrode connections	2, 3 & 4	Potential resolution	0.003%
Max applied potential	±15 V	Current resolution	0.003 % FSR (Best: 150 fA)
Compliance voltage	±20 V	Input impedance	1 TΩ (//20 pF)
Maximum current	±500 mA	Potential bandwidth	100 KHz
EIS frequency	10 µHz to 5 MHz	Computer interface	USB 2.0
Current ranges	±5 nA to ±500 mA in 9 decades	Software	OrigaMaster
Potential ranges	±3 V, ±6V and ±15V	Current accuracy	< 0.1 % FSR
Potential accuracy	< 0.1 % FSR (Full Scale Range)		

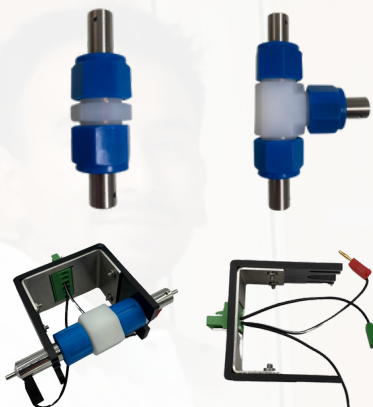
Interactive methods

OrigaMaster

	VOLTAMMETRY
Pot. Cyclic Voltammetry (CV)	yes
Pot. Advanced Cyclic Voltammetry	yes
Gal. Cyclic Voltammetry	yes
Pot. Linear Voltammetry	yes
Pot. CV 4 limits	yes
Stripping Voltammetry	yes
Staircase Voltammetry (SCV)	yes
	CHRONO
Open Circuit Potential (OCP)	yes
Chrono Amperometry (CA)	yes
Chrono Amperometry Expert	yes
Chrono Coulometry (CC)	yes
Chrono Potentiometry (CP)	yes
Chrono Potentiometry Expert	yes
Single Chrono Amperometry	yes
	IMPEDANCE
Pot. Dynamic EIS & Gal. Dynamic EIS	yes
Pot. Fixed Frequency EIS (Capacitance)	yes
Pot. Fixed Frequency EIS vs Time (HFR)	yes
Gal. Fixed Frequency EIS vs Time (HFR)	yes
	CORROSION
Pitting corrosion	yes
General corrosion (Rp)	yes
Coupled corrosion (Evans)	yes
Polarization for corrosion (Tafel)	yes
Harmonic Distorsion Analysis (HDA)	yes
Zero Resistance Ammeter (ZRA)	oui (only with OGF ⁺ & OGF ⁺ EIS)
	PULSE
Pot. Differential Pulse (DPV)	yes
Gal. Recurrent Differential Pulse	yes
Pot. SW Voltammetry (SWV)	yes
Potentiometric Stripping Analysis (PSA)	yes
	BATTERIES, SUPER CAPACITORS and PHOTOVOLTAIQUE
Single Charge or DisCharge	yes
Gal. Charge and DisCharge Cycle	yes
Expert Charge and DisCharge Cycle	yes
PITT & GITT	yes
Constant Power	yes
Constant Resistor	yes
Profile Generator	yes
Internal Resistance	yes
I/V Characterization	yes

BATTERY HOLDERS FOR ORIGAFLEX

Holders / Swagelok (2 electrodes - 3 electrodes)



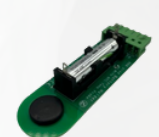
Specifications:

- Suitable for potentiostats from the OrigaFlex range
- Easily removable
- Empty weight: 44.51 g
- Weight with battery: 200 g
- Banana connector: $\varnothing 2$ mm
- Operating temperature: -30°C to 80°C

For more information on our supports and Swagelok, we invite you to consult our accessories catalog.



Coin cell battery holder - AA / AAA - super capacitor



Specifications - coin battery holder :

- Suitable for potentiostats from the OrigaFlex range
- Easily removable
- Length: 80mm
- Width: 32mm
- Temperature probe
- Operating temperature: -30°C to 80°C

For more information on our battery supports, we invite you to contact us.



OrigaDiff

ADDING A VOLTAGE MEASUREMENT IN YOUR CELL



Adapted to the OrigaFlex

IDEAL SOLUTION FOR BATTERY FIELD

CONCEPT :

Add a high input impedance voltage measurement at any point in your cell.

- Connectors: BNC
- Max voltage: $\pm 20V$
- Real-time monitoring
- Available in OM5 & OV2
- Compatible with :
OrigaFlex range
OGS100 & OGS200



Read the application note:
AP-B07 on origalys.com

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WHY DID YOU CHOOSE ORIGALYS?

"The potentiostat is very intuitive and allows complex experimental protocols to be carried out"

The advantage of the Origa**Flex** is its easy handling, particularly with the fact that it can carry out multi-channel tests while being independent of each other. In the event of PC micro-cuts, the channels continue to run by themselves and when the software restarts, the data is not lost. The potentiostat is very intuitive and allows complex experimental protocols to be performed using the most common electrochemical methods.

We carried out different tests with 3 electrodes and this device allowed us to clearly see the behavior of each electrode.

There is also a very important feature which is its robustness because we have had the Origa**Flex** for almost two years.

Although the device works 24 hours a day, 7 days a week, we have not encountered any problems so far.



Université
Ibn Tofail

University Ibn Tofail - Kenitra, Morocco

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CINETICS AND TEACHING

« A good choice of quality and versatility versus price »

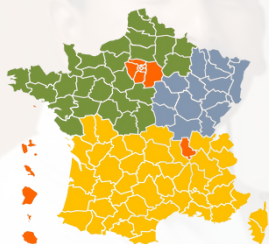
I chose OrigaLys because its OrigaFlex system allows a unique freedom and thus arm instruments according to my need. For example, separate modules and teach in the first semester; then combine them into a single instrument and conduct research in the second semester. I haven't seen that in other instruments I have in my lab. I think I've made a good choice of quality and versatility versus price.



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A QUESTION ? CONTACT US!

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