

## Potentiostat – Galvanostat

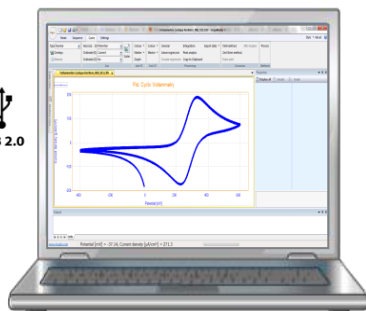
$\pm 100 \mu\text{A}$  to  $\pm 10 \text{ A}$  /  $\pm 15 \text{ V}$  /  $\pm 20 \text{ V}$

OGFPWR  
POWER  
SUPPLY

OGF10A  
POTENTIOSTAT  
GALVANOSTAT



## OrigaMaster



Licence free software  
Windows XP, Vista,  
7, 8 and 10.

Electrochem  
**OrigaLys**



# Included in the Pack

All in one concept and **Ready to use**

## 1 Power Supply - OGFPWR



It supplies current to one Potentiostat **OGF05A**

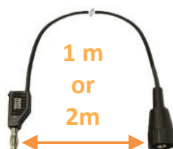
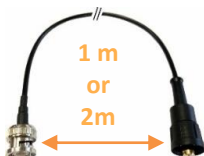
### Technical specifications:

Power: 100-240Vac – 50-60Hz – 1KVA

Weight: 3.10 kg

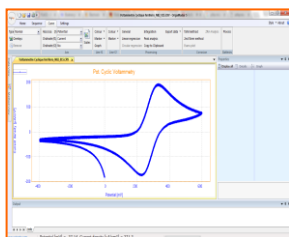
Dimensions (Length x Width x Height): 28.5 x 8.3 x 24.15 cm

## 2 Potentiostat & Galvanostat – OGF10A and its cords



The pack includes cords to connect 2, 3 or 4 Electrodes  
OrigalyS customizes the cords for you, please ask us!

## 3 PC Software – OrigaMaster 5



1. Graphic programming concept
2. User friendly
3. Windows Interface

### Methods included:

**Chrono:** Pot. and Gal. CV, Staircase, CA, CC, CP

**Pulse:** DPV, SWV, GPV

**Batteries:** Charge/Discharge, Constant Power, Profile Generator, Internal Resistance, PITT, GITT

**Corrosion:** Pitting, Rp, Evans, Tafel

### Extra Methods if connected to the OGFEIS:

**EIS:** Gal. and Pot. Dynamic, Mott-Schottky

See the full list of methods on [www.origalys.com](http://www.origalys.com)



The OGF10A combines compactness, performance and accurate price. It is a 10A potentiostat/galvanostat which can be complemented by one Impedance module OGF<sup>EIS</sup>.

His handle allows you to carry it easily and everywhere.

Connected to a Drive Unit OGF<sup>DRV</sup>, it becomes a Multi-Channel system.

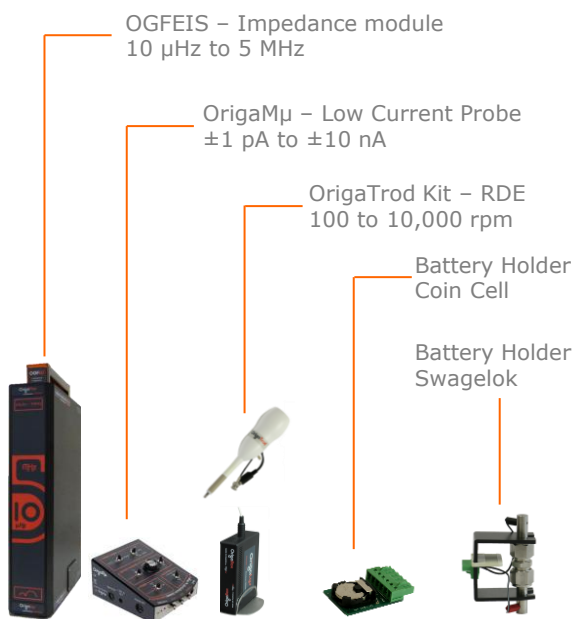
## Built-in modularity:

1. Standalone Potentiostat & Galvanostat
2. Temperature measurement
3. Battery Holder Connector
4. Analog I/O to connect external devices
5. USB control

## Main Technical Specifications

Electrode connections	2, 3 and 4
Max applied potential	±15 V
Compliance voltage	±20 V
Maximum current	±10 A
Current ranges	±100 $\mu$ A to ±10 A in 6 decades
Potential accuracy	< 0.1 % FSR (Full Scale Range)
Potential resolution	0.003 %
Current accuracy	< 0.1 % FSR
Current resolution	0.003 % FSR (Best: 3 nA)
Input impedance	1 T $\Omega$ (//20 pF)
Potential bandwidth	100 KHz
Computer interface	USB 2.0
Software	OrigaMaster

## Optional items



**Easy to use and licence free**

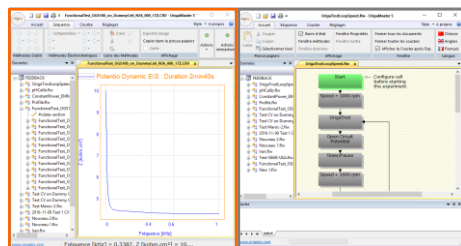


with or without EIS

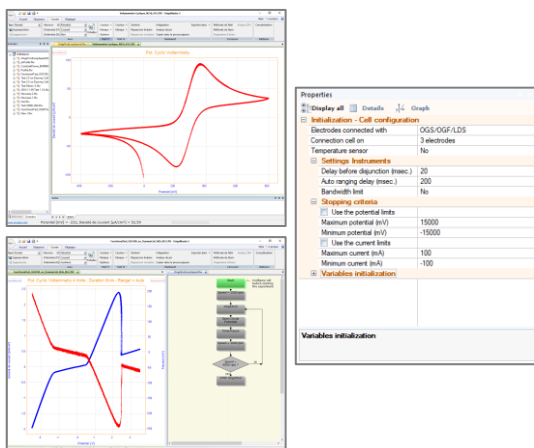
**Multi-Windowing  
Changing scales in real time  
Overlaying without limit**

- ✓ Windows Interface
- ✓ Easy graphic programming
- ✓ Up to 1,000,000 cycles
- ✓ Zooming in real time
- ✓ Export data to Excel, Open Office, Regressi ...

**Opening two OrigaMaster or more at the same time**



1st OrigaMaster 2nd OrigaMaster



- ✓ Expert mode
- ✓ No point or time limitation
- ✓ Safety criteria
- ✓ Customization
- ✓ Multi-languages: English, French and Chinese

# OrigaMaster's Methods

## OrigaFlex

### VOLTAMMETRY

Pot. Cyclic Voltammetry (CV)	✓
Pot. Advanced Cyclic Voltammetry	✓
Gal. Cyclic Voltammetry	✓
Pot. Linear Voltammetry	✓
Pot. CV 4 limits	✓
Pot. Interactive CV	✓
Staircase Voltammetry (SCV)	✓

### CHRONO

Open Circuit Potential (OCP)	✓
Chrono Amperometry (CA)	✓
Chrono Amperometry Expert	✓
Chrono Coulometry (CC)	✓
Chrono Potentiometry (CP)	✓
Chrono Potentiometry Expert	✓
Interactive Potentiometry	✓
Single Chrono Amperometry	✓

### IMPEDANCE

Pot. Dynamic EIS	✓
Pot. Fixed Frequency EIS (Capacitance)	✓
Gal. Dynamic EIS	✓

### CORROSION

Pitting corrosion	✓
General corrosion (Rp)	✓
Coupled corrosion (Evans)	✓
Polarization for corrosion (Tafel)	✓
Zero Resistance Ammeter (ZRA)	x

### PULSE

Pot. Differential Pulse (DPV)	✓
Gal. Recurrent Differential Pulse	✓
Pot. SW Voltammetry (SWV)	✓
Potentiometric Stripping Analysis (PSA)	x

### BATTERIES and SUPER CAPACITORS

Single Charge or DisCharge	✓
Gal. Charge and DisCharge Cycle	✓
Expert Charge and DisCharge Cycle	✓
PITT	✓
GITT	✓
Constant Power	✓
Profile Generator	✓
Internal Resistance	✓

### pH AND mV MEASUREMENT

pH fixed Calibration	x
pH auto Calibration	x
pH measurement	x
mV measurement	x

## Battery Holders for Origaflex



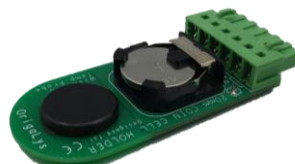
**Swagelok Holders**  
*2 electrodes / 3 electrodes*

### Dimensions:

- ✓ Length: 80 mm
- ✓ Width: 42 mm
- ✓ Height: 65 mm

### Main Specifications:

- ✓ Easily removable from the device
- ✓ Empty weight: 44,51 g
- ✓ Full weight: 200 g
- ✓ Banana connectors:  $\varnothing 2$  mm
- ✓ Operating temperature:  
-30°C à 80°C



**Coin cell Holder**  
*CR2032*

### Fitting the following batteries:

- ✓ Thickness: 3,2 mm maximum
- ✓ Diameter: 20 mm maximum

### Main Specifications:

- ✓ Easily removable from the device
- ✓ Length: 80 mm
- ✓ Width: 32 mm
- ✓ Temperature sensor
- ✓ Operating temperature:  
-30°C to 80°C



**Other Battery Cell Holders:**  
**On demand**

# Detailed specifications

	OrigaFlex			
	OGF500	OGF01A	OGF05A	OGF10A
Potentiostat	yes			
Galvanostat	yes			
Maximum current	±500 mA	±1 A	±5 A	±10 A
Compliance voltage	±20 V			
Max applied potential	±15 V			
Voltage range	±15 V			
Potential accuracy	< 0.1% FSR (full scale range)			
Potential resolution	0.003 %			
Maximum scan rate	200 V/s			
Current ranges	9 (14 with low current option)	9 (13 with low current option)	6 (11 with low current option)	6 (11 with low current option)
with standard board	±5 nA to ±500 mA	±10 nA to ±1 A	±50 µA to ±5 A	±100 µA to ±10 A
with low current option	1 pA to 10 nA			
Current accuracy	< 0.1% FSR			
Current resolution	0.003 % FSR (Best: 150 fA)	0.003 % FSR (Best: 300 fA)	0.003 % FSR (Best: 1,5 nA)	0.003 % FSR (Best: 3 nA)
Input impedance	1 TΩ (//20 pF)			
Interfaces	Ethernet, USB 2.0			
Acquisition time	≥100 µs			
IR Compensation	Yes, manual and automatic Static			
Electrode connections	2, 3, 4			
A/D converter	16 bits			
EIS Capability	10 µHz to 5 MHz			
Analog I/O	Yes, 1			
Floating option	No versatile connection			
Filters	1 µs to 1 s, analog			
Dimensions (DxWxH)	300 x 85 x 450 mm		300 x 120 x 450 mm	300 x 170 x 450 mm
Power requirements	88-264 Vac, 47-63 Hz, 30 VA	88-264 Vac, 47-63 Hz, 40 VA	115/230 Vac, 47-63 Hz, 150 VA	115/230 Vac, 47-63 Hz, 150 VA
Weight	4.55 kg	4.55 kg	8 kg	16 kg
PC Software	OrigaMaster (by USB 2.0) and Origaviewer (by Ethernet)			
Cable length	On demand			
Temperature control	-10°C to 105°C (14°F to 221°F)			

Subject to change without notice



## BATTERIES



[www.origalys.com](http://www.origalys.com)

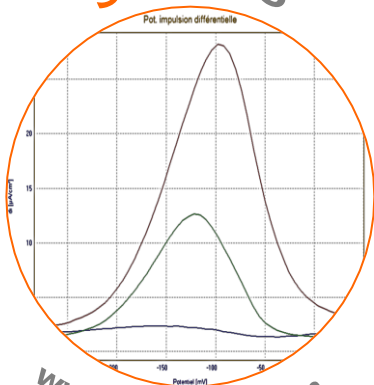
## CORROSION



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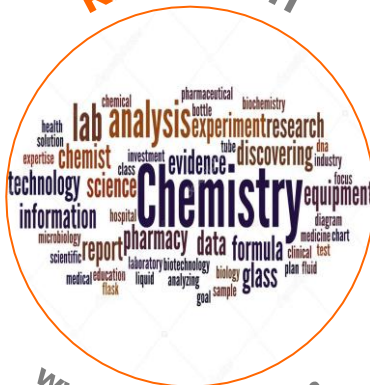


## SENSORS



[www.origalys.com](http://www.origalys.com)

## RESEARCH



[www.origalys.com](http://www.origalys.com)

Subject to change  
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