

# PACK OGF500

**Potentiostat – Galvanostat**  
**±5 nA to ±500 mA / ±15 V / ±20 V**

**OGFPWR  
POWER  
SUPPLY**

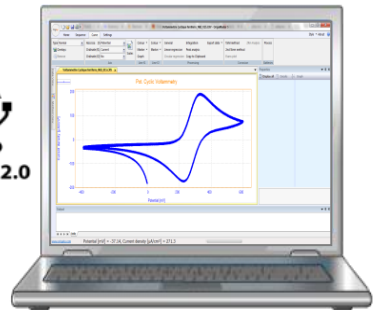
**OGF500  
POTENTIOSTAT  
GALVANOSTAT**



**OrigaMaster**



**USB 2.0**



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

**OrigaLys**

Electrochem



# Included in the Pack

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

## 1 Power Supply - OGF<sup>PWR</sup>



It supplies current to one Potentiostat OGF<sup>500</sup>

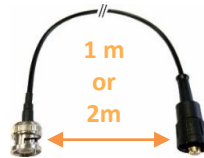
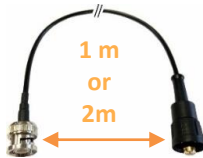
### Technical specifications:

Power: 100-240Vac – 50-60Hz – 1KVA

Weight: 3.10 kg

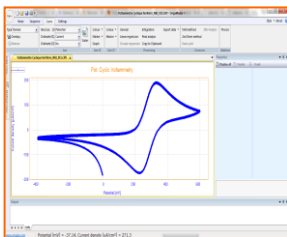
Dimensions (Length x Width x Height): 28.5 x 8.3 x 24.15 cm

## 2 Potentiostat & Galvanostat – OGF<sup>500</sup> 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 OGF<sup>EIS</sup>:

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

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



The OGF500 combines compactness, performance and accurate price. It is a 500 mA potentiostat/galvanostat which can be complemented by one Impedance module OGFEIS.

Its handle allows you to carry it easily and everywhere.

Connected to a Drive Unit OGFDRV, it becomes a Multi-Channel system.

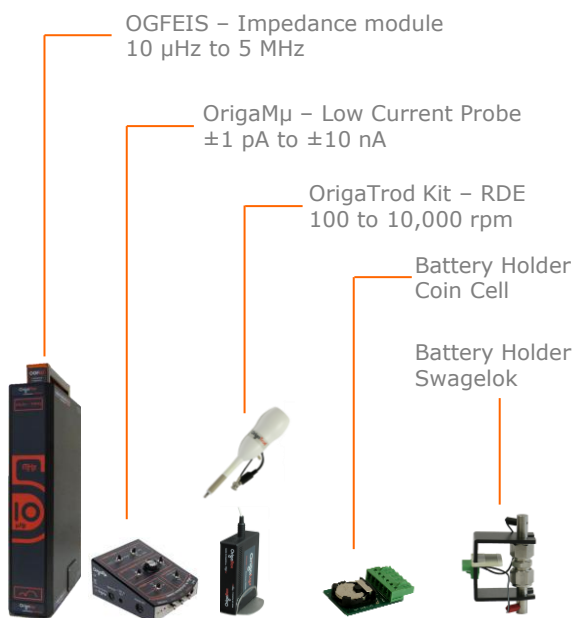
### Built-in modularity:

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	±500 mA
Current ranges	±5 nA to ±500 mA in 9 decades
Potential accuracy	< 0.1 % FSR (Full Scale Range)
Potential resolution	0.003 %
Current accuracy	< 0.1 % FSR
Current resolution	0.003 % FSR (Best: 150 fA)
Input impedance	1 TΩ (//20 pF)
Potential bandwidth	1 MHz
Computer interface	USB 2.0
Software	OrigaMaster

### Optional items



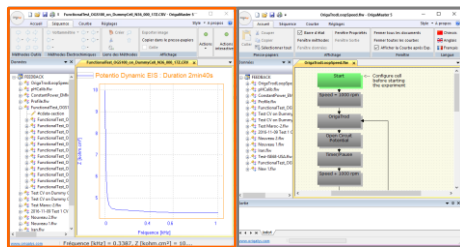
Easy to use and licence free



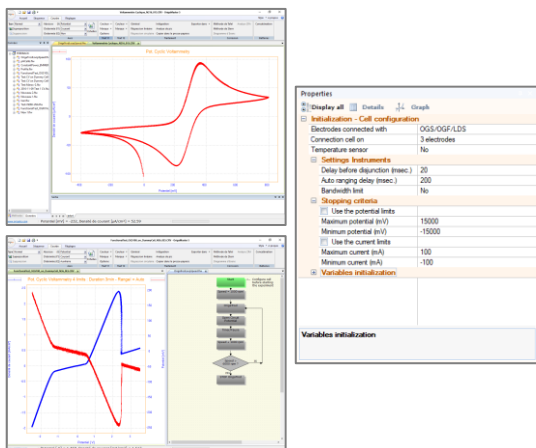
**Multi-Windowing**  
**Changing scales in real time**  
**Overlaying without limit**

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

**Are you looking for a dedicated or personalized method?  
Please, consult us.**

## Battery Holders for OrigaFlex



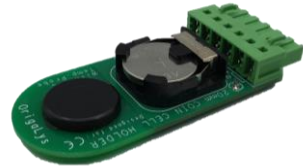
**Swagelok Holders**  
*2 electrodes / 3 electrodes*

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

Subject to change without notice



