

# OGF500

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

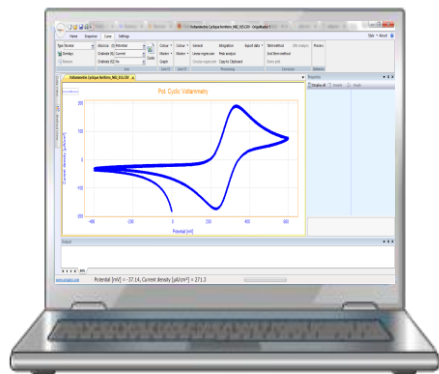


**POTENTIOSTAT  
GALVANOSTAT  
T°C PROBE  
BATTERY HOLDER**

## OrigaMaster 5



**USB 2.0**



**Licence free software**

**Windows XP, Vista, 7, 8 and 10.**

**EASY TO USE**

Electrochem  
**OrigaLys**



# How it works

## Supplying the potentiostat...

### Multi-Channel mode



Use the **Drive Unit & Dummy Cell**, if you need more than one Potentiostat

### Single-Channel mode

Use the **Power Supply**, if you need just one Potentiostat to begin



### Drive Unit & Dummy Cell

#### 3 main functions:

1. It **supplies current to the channels**, as the sum of each amps channel connected to a Drive Unit shall not exceed **20A** or **10 Channels**.
2. It allows **connection to a computer via Ethernet**. Thus, the included PC software, called **OrigaViewer** (licence free) can control every channel of the system. Individually, each channel can be controlled by the PC software **OrigaMaster** via USB.
3. Finally, thanks to its **dummy cell**, functional tests can be performed on cords and on the different Channels. Thus, it is ensured that each method will be perfectly performed.



For example:

Five 500 mA Channels  
+  
One EIS Channel

### Power Supply - OGFPOWER

#### 2 main functions:

1. It **supplies current to only one channel (500 mA, 1 A or 5 A)**.
2. It **also supplies current to an EIS module**.

It is **not connected to a PC**. The connection has to be made **from the Channel (via USB from the rear panel)**. Here, the channel is controlled by **OrigaMaster**.

**No Dummy Cell inside**

#### 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



or



For example:

One 500 mA Channel + One 500 mA Channel  
+ One EIS Channel or + One EIS Channel



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.

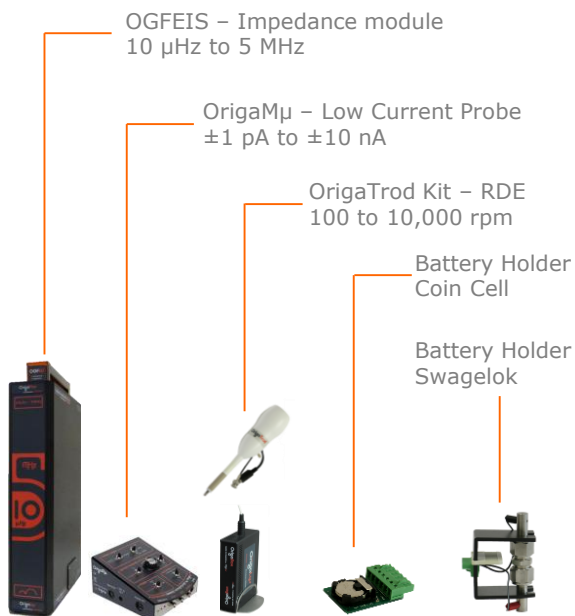
### Built-in modularity:

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	$\pm 15$ V
Compliance voltage	$\pm 20$ V
Maximum current	$\pm 500$ mA
Current ranges	$\pm 5$ nA to $\pm 500$ 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	10 G $\Omega$ (//20 pF)
Potential bandwidth	1 MHz
Computer interface	USB 2.0
Software	OrigaMaster

### Optional items



# OrigaMaster's Methods

OrigaFlex – OGF500

## 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)	*

## PULSE

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

## 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	✓

Subject to change  
15-10-2018

Country Representative

OrigaLys ElectroChem SAS

Les Verchères 2  
62A, avenue de l'Europe  
69140 RILLIEUX-la-PAPE  
FRANCE

☎ +33 (0)9 54 17 56 03

☎ +33 (0)9 59 17 56 03

[contact@origalys.com](mailto:contact@origalys.com)

