



PRODUCT CATALOG

Specialist in electrochemical analysis & measurement devices

www.origalys.com



WHO ARE WE?

Specialist in electrochemical analysis and measurement devices

Designing, manufacturing & selling of analytical instruments in Electrochemistry

Potentiostats, Galvanostats, Impedance meters, pH-meters, Conductivity meters, Electrodes & accessories...



Customers all over the world



All our products are designed and manufactured in France



All our products are guaranteed for 5 years



31 distributors in 66 countries



90% of our partners are based in the Auvergne Rhône-Alpes region

MORE THAN 75 YEARS OF EXPERIENCE IN ELECTROCHEMISTRY...

1946

Tacussel



1988

Radiometer



2010

OrigalyS



2022

Origafactory



OUR PRIORITIES

CARING ABOUT PEOPLE

Participative management - Team-Building - Trust - Solidarity - Evolution



A united and dynamic team

INNOVATE DIFFERENTLY & SUSTAINABLY

Initiative - Eco conception - Repairability - Sustainability - Performance



SHARE & TRANSMIT

Experiences - Preserve our know-how - Transmit - Train



They trust us!



To access our references / articles / scientific publications:



And why not you?



FRANCE  Fuel Sea Innovating
tech to allow



MOROCCO  



MARTINIQUE   



SPAIN  



PAKISTAN  



FRANCE  GR7gaz

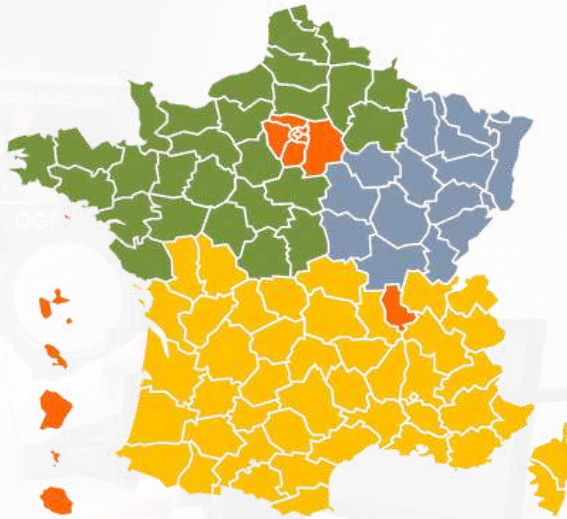


LUXEMBOURG  



DENMARK  

OUR FRANCE NETWORK



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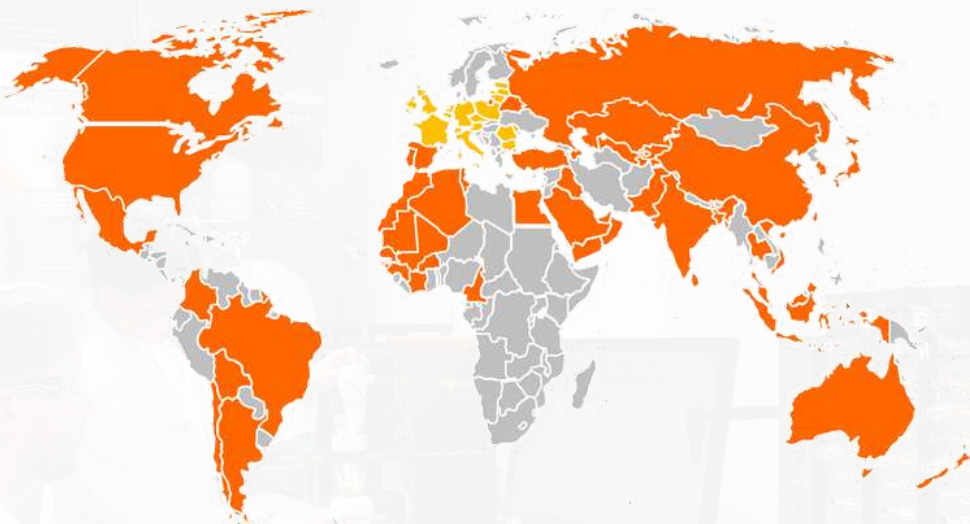
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Find the list of our
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website:



If we do not yet have a distributor in your country, you can contact us directly by telephone on **+33 9 54 17 56 03** or by email: **sales@origalys.com**.



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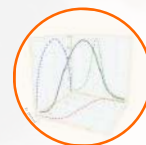


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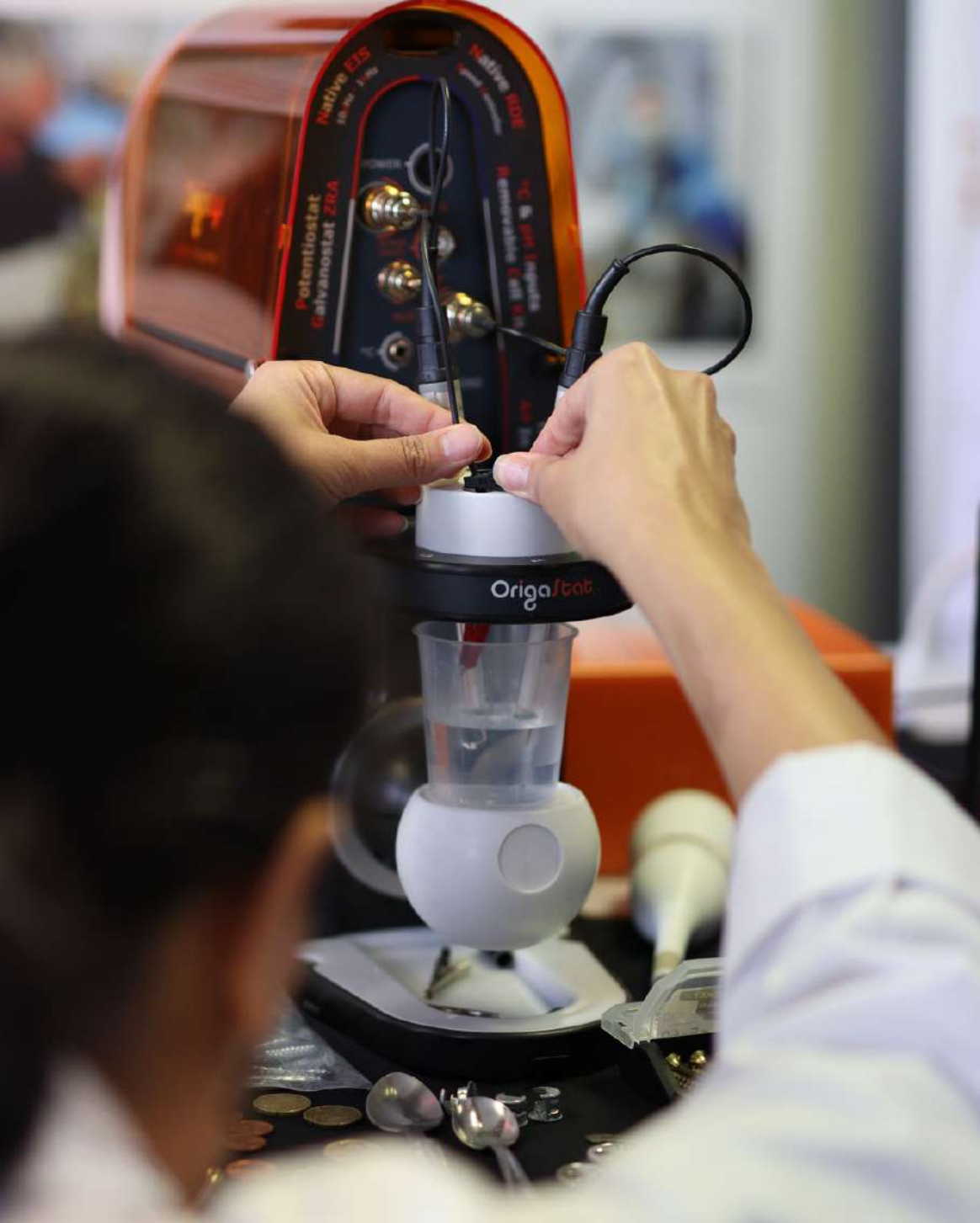


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CONSULT THE ORIGASTAT CATALOG:



The Origastat Range

ALL-IN-ONE SYSTEM



OGS080

± 17.5 V
 ± 100 mA
 ± 5 V

OGS100

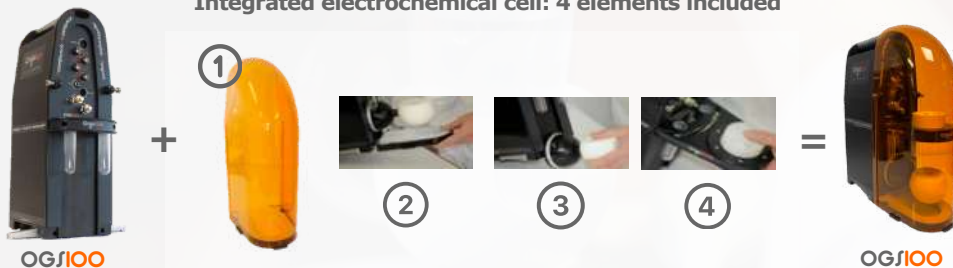
± 17.5 V
 ± 100 mA
 ± 5 V

OGS200

± 35 V
 ± 2 A
 ± 15 V

OrigaCell Kit (available in option):

Integrated electrochemical cell: 4 elements included



Standard functions

Potentiostat - Galvanostat

Impedancemeter EIS: 10 μ Hz – 1 kHz with OGFEIS: up to 5 MHz

Speed controller for RDE

FOR OGS100 AND OGS200:

T°C probe - pH-meter

Compatible with OGFEIS / OrigaBooster / OrigaMu

ANALOG

TTL



OGS080

The complete and economical instrument

This Potentiostat, Galvanostat, Impedance-meter has been specially designed for **Teaching**.

The TPs can be easily prepared in advance and protected by the plastic cover.



Easily transportable

- Complete solution: Potentiostat, Galvanostat, Impedancemeter (10 μ Hz - 1 KHz), RDE Speed Controller and PC Software.
- The electrochemical cell and electrode holder can be adjusted or removed.
- A magnetic stirrer can also be added if needed.

Find all the technical specifications on page 20.

OPTIONS

OrigaTrod: Rotating Disc Electrode (RDE)

OrigaLine: Static electrode, Glass electrodes, Tips, Sample holder, Electrochemical cell, etc.

OrigaTest: Dummy cell



OrigaTrod



Electrode



Magnetic stirrer



Dummy cell

“

PREPARATORY CLASSES

« **Because of the software intuitive programming** »

I knew OrigaLys the first time because they fixed the Radiometer's instrument of the Ecole Normale Supérieure (ENS Lyon). After analysing the OrigaLys website www.origalys.com, the OrigaStat OGS080 seemed the most suitable device for our teaching purposes, especially because of the software intuitive programming (flowchart). Indeed, it was one of the most important criteria to select OrigaLys instruments. Its evolutionary capacities, such as battery methods implementation, makes the OrigaStat the perfect instrument for preparatory classes. Thus, we would be able to have great and various methods for teaching.



Lycée du Parc - Lyon, France



USB 2.0

OG100

A scalable search system

This Potentiostat, Galvanostat, Impedance meter has been specially **designed for Research.**

Easily transportable

- Complete solution: Potentiostat, Galvanostat, Impedancemeter (10 μ Hz - 1 KHz), RDE Speed Controller and PC Software.
- Control of external devices via Analog I/O or RS232: RDE, burette, pump, booster, etc.
- The electrochemical cell and electrode holder can be adjusted or removed.
- A magnetic stirrer can also be added if needed.

Find all the technical specifications on page 20.

OPTIONS

OrigaTrod: Rotating Disc Electrode (RDE)

OrigaBoost: Current Booster, from 5 A to 20 A

OrigaM μ : Low Current Probe, down to 1 pA

OrigaLine: Static electrodes, Glass electrodes, Tips, Sample holder, Electrochemical cell, etc.

OrigaTest: Dummy Cell

OGFEIS: External EIS module, up to 5 MHz



OrigaTrod



OrigaM μ



OGFEIS



Dummy Cell

“

CORROSION PHENOMENA IN THE AQUEOUS PHASE

« We recommend OrigaLys materials and equipment for the study of electrochemical phenomena »

We chose to work with the company OrigaLys for their quality of service, their “Made in France” philosophy and their innovative equipment allowing us to study corrosion phenomena in the aqueous phase in detail. Their OGS100 potentiostat/galvanostat is easy to use and allows us to create new original analysis sequences to help select active ingredients and evaluate dosage ranges. The support service is also exceptionally responsive, responding quickly and efficiently to our questions. We strongly recommend OrigaLys equipment for the study of electrochemical phenomena.



European leader in water treatment - Paris, France

OGS200

A compact, complete and powerful instrument

This Potentiostat, Galvanostat, Impedance meter has been specially **designed for Industry**.



Easily transportable

- Complete solution: Potentiostat, Galvanostat, Impedancemeter (10 μ Hz - 1 KHz), RDE Speed Controller and PC Software.
- Control of external devices via Analog I/O or RS232: RDE, burette, pump, booster, etc.
- The electrochemical cell and electrode holder can be adjusted or removed.
- A magnetic stirrer can also be added if needed.

Find all the technical specifications on page 20.

OPTIONS

OrigaTrod: Rotating Disc Electrode (RDE)

OrigaBoost: Current Booster, from 5 A to 20 A

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OrigaLine: Static electrode, Glass electrodes, Tips, Sample holder, Electrochemical cell, etc.

OrigaTest: Dummy Cell

OGFEIS: External EIS module, up to 5 MHz



OrigaTrod



OrigaM μ



OGFEIS



Dummy Cell

“

ANTICORROSION COATINGS

« **It brings us a huge capacity to realize measurement on research field** »

We work on the anticorrosion coatings and we need to make measurements on characterizations and on production electrolyte research. By using this potentiostat, we develop the analysis method to anticipate the weak aspect of a process metal deposition. This device can be monitored, thus we can easily control the experiment conditions. It brings us a huge capacity to realize measurement on research field, and mainly on the process itself. The results are very relevant. The instrument is also useful to analyze metals in aqueous solution. It is a good environment advantage.



Aéroprotec, expert in aeronautic coatings - Pau, France

The Origastat Range

OGS080 - Ideal for teaching (PW)



Maximum Current: ± 100 mA
Ranges: ± 1 nA to ± 100 mA
Max. Applied Potential: ± 5 V
Easily transportable
Glass free



OGS100 - Ideal for research



Maximum Current: ± 100 mA
Ranges: ± 1 nA to ± 100 mA
Max. Applied Potential: ± 5 V
Connect and control external devices
Polyvalent



OGS200 - Ideal for surface treatment



Maximum Current: ± 2 A
Ranges: ± 20 nA to ± 2 A
Max. Applied Potential: ± 15 V
Connect and control external devices
Polyvalent and versatile



MAIN APPLICATIONS OF ORIGASTAT



Surface treatment



Corrosion



Practical work



Sensors



Conservation

“

QUANTIFICATION OF CORROSION

« **We strongly recommend OrigaLys equipment for the electrochemical measurement of corrosion** »

We chose to work with Origa**Lys** because this company is close to our values with « Made In France » equipment; devices are designed and manufactured in France. Pricing was also a criterion of choice regarding equipment' accuracy, robustness and reliability. In addition, Origa**Lys** has offered us the services of its engineering office to propose us a custom solution, that perfectly fit our needs. The machines are very easy to use with a "user-friendly" software. Programmable methods, graphics and different data export solutions facilitate measurement and result interpretation. The instrument is also useful to analyze metals in aqueous solution. It is a good environment advantage. The technical support of Origa**Lys** has contributed to the success of internal projects by being pro-active, fast and effective.



BIC - Marne-la-Vallée, France

OrigaBoost

Powerful and modular



The OrigaBoost increases the maximum current of the following instruments:
OrigaStat: OGS100 and OGS200

Maximum current can be easily increased by adding 5A modules.

Thus, the available range is:
5 A, 10 A, 15 A and 20 A.

HOW IT WORKS

The principle is to connect 1 « Drive Unit » and 5A « Power Units » to a compatible OrigaLys potentiostat.

The « Drive Unit » replaces the front face of the OrigaLys potentiostat to which it is connected. Thus, the electrodes are connected to the « Drive Unit ».



TECHNICAL SPECIFICATIONS

Electrodes connections	2, 3 and 4	Accuracy	< 0.1 % FSR (Full Scale Range)
Max. applied potential	±15 V	Operation mode	Potentiostat/ Galvanostat
Compliance voltage	±20 V	Bandwidth: • Potentiostatic • Galvanostatic	50 KHz
Maximum current	±5 A / ±10 A ±15 A / ±20 A	PC Software	OrigaMaster
Resolution	0.003%	Compatibility	OGS100 OGS200 OGFEIS

The OrigaStat Range

DETAILED SPECIFICATIONS

	OrigaStat		
	OGS080	OGS100	OGS200
Potentiostat	Yes		
Galvanostat	Yes		
Impedancemeter	Yes		
Maximum current	±100 mA		±2 A
Compliance voltage	±17.5 V		±35 V
Max. applied potential	±5 V		±15 V
Potential resolution	0.003 % (30 µV)		0.003 % (91 µV)
Potential accuracy	< 0.1% FSR (Full Scale Range)		
Voltages ranges	±1 V, ±2 V and ±5 V		±3 V, ±6 V and ±15 V
Maximum scan rate	200 V/s		
Current ranges	9	9 (12 with low current option)	9 (14 with low current option)
with standard board	±1 nA to ±100 mA		±20 nA to ±2 A
with low current option	Not available	1 pA to 10 nA	
Current accuracy	< 0.1% FSR (Full Scale Range)		
Current resolution	0.003 % FSR (best resolution: 30 fA)		0.003 % FSR (best: 600 fA)
Potentiostat rise/fall time	< 2 µs		
Input impedance	> 1 TΩ (//20 pF)		
Interfaces	USB 2.0		
Bandwidth	1 MHz		
Acquisition time	> 100 µs		
IR compensation	« Manual » and « automatic feedback »		
Electrodes connections	2, 3, 4		
A/D converter	16 bits		
EIS capability	10 µHz to 1 KHz.	10 µHz to 1 KHz. Up to 5 MHz with OGFEIS	
Analog I/O	Not available	Yes, 1	
External current booster	Not available	From 5 A to 20 A	
Floating option	Versatile connectivity		
Filters	1 µs to 1 s, analog		
Dimensions (DxWxH)	326 x 135 x 418 mm		400 x 135 x 418 mm
Dimensions (Unfolded feet)	326 x 247 x 418 mm		400 x 247 x 418 mm
Power requirements	90-264 Vac, 47-63 Hz, 30 VA		90-264 Vac, 47-63 Hz, 120 VA
Weight	5.5 kg		8 kg
PC software	OrigaMaster (USB 2.0)		
Cell cable length	On demand		
Temperature control	Not available	-10°C to 105°C (14°F to 221°F)	

*Subject to change without notice.
Please, contact us for more information.*

OGF*500
All in one
Potentiostat
Galvanostat
EIS & ZRA



OGFPWR
Power
Supply

OrigaFlex

CONSULT THE ORIGAFLEX CATALOG:



The Origaflex Range

DISCOVER THE NEW POWERS



OGF 500
OGF⁺500
OGF⁺500EIS

±500 mA / ±20 V



OGF 01A
OGF⁺01A
OGF⁺01AEIS

±1 A / ±20 V



OGF 05A
OGF⁺05A
OGF⁺05AEIS

±5 A / ±20 V



OGF 10A
OGF⁺10A
OGF⁺10AEIS

±10 A / ±20 V

- System of « independant module ».
- Combination of modules (or channels) from different powers: 500 mA, 1 A, 5 A and 10 A.
- Each module is a true Potentiostat and Galvanostat.
- Connector for Battery Holders and T°C.
- Impedance module (OGFEIS) in option.

DISCOVER OUR ORIGAMUX MULTIPLEXER



MUX01A
MUX10A

**Allows you to chain sequential measurements
(corrosion / battery / fuel cell)**

MAIN APPLICATIONS OF ORIGAFLEX



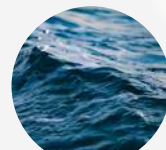
Batteries



Corrosion



Fuel cells



Sensors

The Origaflex Range

OGF: PERFECT FOR TEACHING / EDUCATION



- Maximum Current: ± 500 mA, ± 1 A, ± 5 A and ± 10 A
- Maximum Applied Potential: ± 15 V
- Compliance: ± 20 V

Available modules:

OGF500 / OGF01A
OGF05A / OGF10A



OGF⁺: PERFECT FOR RESEARCH / CORROSION



- New potential ranges: ± 3 V, ± 6 V and ± 15 V
- All the specifications of the OGF
- New method: ZRA
- Communication: TTL



Available modules:

OGF⁺500 / OGF⁺01A
OGF⁺05A / OGF⁺10A



OGF⁺EIS : PERFECT FOR RESEARCH / BATTERIES



- All the specifications of the OGF and OGF⁺
- Built-in EIS: 10 μ Hz – 5 MHz

Available modules:

OGF⁺500EIS / OGF⁺01AEIS
OGF⁺05AEIS / OGF⁺10AEIS



The Origaflex Concept

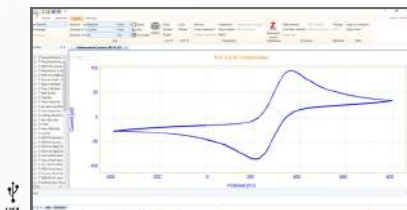
Our systems are flexible and modular according to your needs.

FROM AN ECONOMICAL SINGLE POTENTIostat



Thanks to
the **Power
Supply**

OrigaMaster - OM5



TO MULTI-POTENTIOSTATS / GALVANOSTATS / EIS



Thanks to
the **Drive
Unit**

OrigaViewer - OV2



OR A SPLIT MULTI-POTENTIOSTATS TO GET MORE SYSTEMS



AND



Thanks to
the **Power
Supply**

The Origaflex Range

FUNCTIONING

To power the system, there are three possibilities, it all depends 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 stirrer
- Thermostat bath
- Solar simulator
- Climate chamber
- Etc.

POWER SUPPLY - FOR SINGLE-CHANNEL



OGF^{PWR}

- Power supply
- For only one channel



One channel of 500
mA
=
Pack OGF⁵⁰⁰
Consult our different
Pack OGF :



The Origaflex Range

TECHNICALS SPECIFICATIONS

	Origaflex			
	OGF500 OGF +500 OGF +500EIS	OGF01A OGF +01A OGF +01AEIS	OGF05A OGF +05A OGF +05AEIS	OGF10A OGF +10A OGF +10AEIS
Potentiostat	Yes			
Galvanostat	Yes			
Maximum current	±500 mA	±1 A	±5 A	±10 A
Compliance voltage	±20 V			
Max. applied potential	±15 V			
Potential resolution	0.003 %			
Potential accuracy	< 0.1% FSR (Full Scale Range)			
Voltage range	±15 V with OGF / ±3 V, ±6 V and ±15 V with OGF+			
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)			
EIS	10 µHz - 5 MHz with OGF+EIS			
Interfaces	Ethernet, USB 2.0			
Acquisition time	> 100 µs			
IR compensation	Yes, manual and automatic Static			
Electrodes connections	2, 3, 4			
A/D converter	16 bits			
Floating option	Versatile connection			
Filters	1 µs to 1 s, analog, anti-aliasing filter (50 Hz / 60 Hz)			
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	
Weight	4.55 kg		8 kg	16 kg
Software	OrigaMaster (USB 2.0), Origaviewer (Ethernet)			
Cable length	On demand			
Temperature control	-10°C to 105°C (14°F to 221°F)			
Auxiliary inputs	1 with OGF / 2 with OGF+			
Bandwidth	1 MHz		100 KHz	
Analog I/O	Yes, 1			

*Subject to change without notice.
Please, contact us for more information.*



OGF500



OGF500

±500 mA / ±20 V

OGF⁺500

±500 mA / ±20 V

Voltage ranges:
±3 V / ±6 V / ±15 V

ZRA Method

TTL Communication



OGF⁺500EIS

±500 mA / ±20 V

Voltage ranges:
±3 V / ±6 V / ±15 V

ZRA Method

TTL Communication

**Built-in EIS:
5 MHz - 10 μHz**

- Simultaneous measurements on different channels can be synchronized.
- Built-in EIS with OGF⁺500EIS (10 μHz - 5 MHz).
- Individually controllable, via USB, with OrigaMaster 5.
- View the module status and free potential.
- Up to 10 OGF500 modules with 1 Drive Unit & Dummy Cell.

TECHNICAL SPECIFICATIONS

Electrodes	2, 3 and 4	Potential range	±15 V (OGF) / ±3, ±6, ±15 V (OGF+)
Max. applied potential	±15 V	Potential accuracy	< 0.1% FSR (Full Scale Range)
Compliance voltage	±20 V	Potential resolution	0.003%
Maximum current	±500 mA	Current accuracy	< 0.1% FSR
Current ranges	±5 nA to ±500 mA in 9 decades	Current resolution	0.003% FSR (best: 150 fA)

Find all the technical specifications on page 26.

OPTIONS

OrigaTrod Kit



OrigaMμ



OrigaDiff



Battery holders

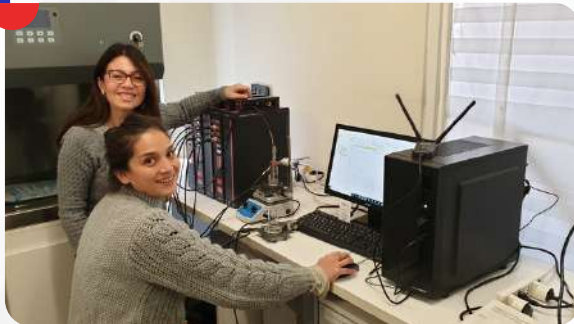


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CORROSION ON AERONAUTICAL MATERIALS

« **The after-sales service is very efficient** »

I like Origalys because they are a good quality/price ratio. In addition, the after-sales service is very efficient: my laboratory is in Chile and despite the distance, once a year I receive the visit of Cédric Martinez who updates my equipment both in hardware and the software.



Pontificia Universidad Católica de Chile



OGFOIA

New!

OGF01A

±1 A / ±20 V

New!

OGF⁺01A

±1 A / ±20 V

OGF⁺01AEIS

±1 A / ±20 V

Voltage ranges:
±3 V / ±6 V / ±15 V

ZRA Method

TTL Communication

Voltage ranges:
±3 V / ±6 V / ±15 V

ZRA Method

TTL Communication

**Built-in EIS:
5 MHz - 10 μHz**

- Simultaneous measurements on different channels can be synchronized.
- Built-in EIS with OGF⁺01AEIS (10 μHz - 5 MHz).
- Individually controllable, via USB, with OrigaMaster 5.
- View the module status and free potential.
- Up to 10 OGF01A modules with 1 Drive Unit & Dummy Cell.

TECHNICAL SPECIFICATIONS

Electrodes	2, 3 and 4	Potential range	±15 V (OGF) / ±3, ±6, ±15 V (OGF+)
Max. applied potential	±15 V	Potential accuracy	< 0.1% FSR (Full Scale Range)
Compliance voltage	±20 V	Potential resolution	0.003%
Maximum current	±1 A	Current accuracy	< 0.1% FSR
Current ranges	±10 nA to ±1 A in 9 décades	Current resolution	0.003% FSR (best: 300 fA)

Find all the technical specifications on page 26.

OPTIONS

OrigaTrod Kit



Origamu



Origadiff



Battery holders



“

QUANTIFICATION OF CORROSION

« It ensures quality technical follow-up and does not hesitate to go further to help us reflect on areas of improvement and development »

The CETIM has been working with OrigaLys for 10 years. It was one of our first suppliers of electrochemical equipment. We started with the acquisition of a multichannel potentiostat (8 channels with 1 impedance channel) which is still very functional today. OrigaLys is much more today than just a supplier, it has become a true partner and has accompanied us for all its years in our electrochemical tests. We can highlight the great listening and availability of the OrigaLys team. It ensures quality technical follow-up and does not hesitate to go further to help us reflect on areas of improvement and development relevant to our tests. OrigaLys, for example, helped us develop an electrochemical test method to qualify a sacrificial anode following the requirements of a specification from one of our customers. Today, we set up with their technical support electrochemical permeation tests to measure the amount of hydrogen entering a metallic material.





OGF05A

New!

New!

OGF05A

±5 A / ±20 V

OGF⁺05A

±5 A / ±20 V

Voltage ranges:
 ±3 V / ±6 V / ±15 V

ZRA Method

TTL Communication

OGF⁺05AEIS

±5 A / ±20 V

Voltage ranges:
 ±3 V / ±6 V / ±15 V

ZRA Method

TTL Communication

Built-in EIS:
 5 MHz - 10 μHz

- Simultaneous measurements on different channels can be synchronized.
- Built-in EIS with OGF⁺05AEIS (10 μHz - 5 MHz).
- Individually controllable, via USB, with OrigaMaster 5.
- View the module status and free potential.
- Up to 4 OGF05A modules with 1 Drive Unit & Dummy Cell.

TECHNICALS SPECIFICATIONS

Electrodes	2, 3 and 4	Potential range	±15 V (OGF) / ±3, ±6, ±15 V (OGF⁺)
Max. applied potential	±15 V	Potential accuracy	< 0.1% FSR (Full Scale Range)
Compliance voltage	±20 V	Potential resolution	0.003%
Maximum current	±5 A	Current accuracy	< 0.1% FSR
Current ranges	±50 μA to ±5 A in 6 décades	Current resolution	0.003% FSR (best: 1.5 nA)

Find all the technical specifications on page 26.

OPTIONS

OrigaTrod Kit



OrigaMμ



OrigaDiff



Battery holders



“

DEVELOPMENT OF NEW ELECTROCATALYSTS

« **We strongly recommend this system for the electrochemical measurement** »

Origa**Flex** (OGF05A) is an excellent option to perform electrocatalytic measurements related to water electrolysis. The system is very easy to use and the software offers multiple and interesting options. On the other hand, the technical support of Origa**Lys** is always accessible and effective. We strongly recommend this system for the electrochemical measurements dealing with water electrolysis.



Universitat d'Alacant
Universidad de Alicante

Institute of Electrochemistry - University of Alicante, Spain

OGFIOA



New!

OGF10A
±10 A / ±20 V

New!

OGF⁺10A
±10 A / ±20 V

OGF⁺10AEIS
±10 A / ±20 V

Voltage ranges:
± 3 V / ± 6 V / ± 15 V

Voltage ranges:
± 3 V / ± 6 V / ± 15 V

ZRA Method

ZRA Method

TTL Communication

TTL Communication

Built-in EIS:
5 MHz - 10 μHz

- Simultaneous measurements on different channels can be synchronized.
- Built-in EIS with OGF⁺10AEIS (10 μHz - 5 MHz).
- Individually controllable, via USB, with OrigaMaster 5.
- View the module status and free potential.
- Up to 10 OGF10A modules with 1 Drive Unit & Dummy Cell.

TECHNICALS SPECIFICATIONS

Electrodes	2, 3 and 4	Potential range	±15 V (OGF) / ±3, ±6, ±15 V (OGF ⁺)
Max. applied potential	±15 V	Potential accuracy	< 0.1% FSR (Full Scale Range)
Compliance voltage	±20 V	Potential resolution	0.003%
Maximum current	±10 A	Current accuracy	< 0.1% FSR
Current ranges	±100 μA to ±10 A in 6 décades	Current resolution	0.003% FSR (best: 3 nA)

Find all the technical specifications on page 26.

OPTIONS

OrigaTrod Kit



OrigaMμ



OrigaDiff



Battery holders



“

FUEL CELL, ELECTROLYZER & CATALYST

« **The OGF10A+EIS has been a great success in achieving our goals and produced good results** »

We have been using the OrigaLys model OGF10A+EIS used for general electrochemistry, Fuel cell, Electrolyzer and Catalyst research activity. We are very pleased with the results. Our aim was to develop a catalyst for Green energy applications. The OrigaLys machine has been a great success in achieving our goals and produced good results. The unit is easy to operate, has an analysis tools and produces a report that is both comprehensive and easy to interpret.



JAIN University - Bengaluru, Inde

OGFMUX

Electrochemical multiplexer

Program your methods on a multitude of cells



MULTI-POTENTIOSTAT



MULTIPLEXER

- Maintain your potentials on all your cells and take current measurements sequentially
- Get up to 72 cells for 1 measuring instrument

ZRA mode :

- Maintaining 0 V potential during sequential measurements
- Safety against power outages in ZRA mode

TECHNICALS SPECIFICATIONS

Number of cells	8 cells per MUX	Current range	From pA to 10 A per cell depending on the connected OGF
Switched Inputs	WRK + (REF REF2 AUX TEMP + GND)	Maintaining potential	15 V ±100 mA in 2 / 3 / 4 electrodes
Availability	01A / 10A	Safety against power outages in ZRA mode	Yes
Switching type	Relay	Communication	Driven by OGFDRV (ethernet)
Impedance input	10GΩ 20pF	Connectors	1 6-point connector + 2 SMB per cell
Cascading	Possibility of having 9 OrigaMux in cascade, allowing up to 72 channels	PC software	OrigaViewer 2



Corrosion monitoring
Corrosion inhibitor test

Galvanic corrosion
Surface treatment

Fuel cells
Microbial Fuel Cell

Electrolyser



EASCVsens PROJECT



Voltammetry by current sampling on a network of electrodes for the detection of metallic trace elements in water



Partners :



Origamux Multiplexer



Ultra micro electrode array

Read more:

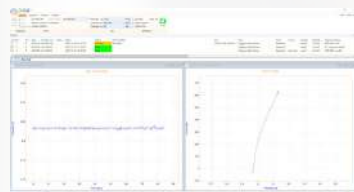


Bi-Potentiostats

- Monitor by Ethernet
- RRDE compatible
- Three potentiostats
- OrigaFlex channels are combinable: from 500 mA, 1 A, 5 A to 10 A.



DRV Unit	WRK 1	WRK 2	AUX REF
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OrigaViewer 2

IDEAL FOR RRDE ANALYSIS

Concept

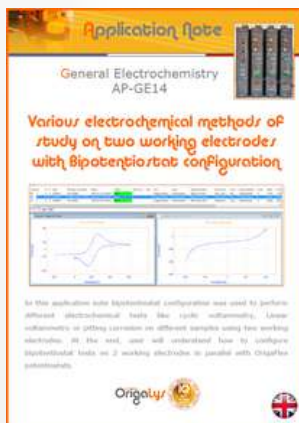
In bi-potentiostat mode, we monitor three electrodes: two working electrodes (WRK 1 & WRK 2) and one counter electrode (AUX).

Optimal configuration

Current Work 1 + Work 2 < Current Aux/Ref

APPLICATION NOTE: AP-GE14

Find out via the QR code below how to configure the bipotentiostat with the OrigaFlex range.



“

ELECTROCATALYSIS AND BATTERY RESEARCH

" The Origaflex offers great value for a flexible system "

It performs flawless during standard measurements such as rotating-ring disk measurements of nanoparticles or charge discharge curves of battery materials. We have used it, e.g., in our recent publication in-ChemSusChem. The system is simple and easy to use. Most importantly, my students like to work with the potentiostat as well as with the software Origamaster and Origaviewer. The software is very intuitive and allows drawing complex experimental protocols using the most common electrochemical methods. The graphical representation of the experimental protocol makes it also easy to document the performed experiment. Overall, the Origaflex system offers great value for a flexible and accessible potentiostat system at a low price.



IN OPTION

OGFEIS



Complete your existing system with our external Electrochemical Impedance Spectroscopy (EIS)

Available methods:

- Potential Dynamic EIS
- Potential Fixed Frequency (Capacitance): Mott-Schottky
- Potential Fixed Frequency versus Time (HFR)
- Galvanic Fixed Frequency versus Time (HFR)
- Galvanic Dynamic EIS

COMPATIBILITY



OGFEIS WITH ORIGAFLEX

OGF500 OGF⁺ 500
 OGF01A OGF⁺ 01A
 OGF05A OGF⁺ 05A
 OGF10A OGF⁺ 10A



OGFEIS WITH ORIGASTAT

OGS100
 OGS200

TECHNICALS SPECIFICATIONS

Frequency range	10 μ Hz - 5 MHz	Data	Nyquist, Bode, Admittance, Mott-Schottky
Résolution	5 ppm	Analysis	Fit and simulation, find circle, element subtraction, export data
Input range	± 15 V	PC software	OrigaMaster and OrigaViewer
Signal types	Sine with delay and average on 1 to 10 determinations	Potentiel AC Amplitude	6 μ V à 7.5 V maximum
Input channels	E and I from the Potentiostat / galvanostat or X and Y external signals	Current AC Amplitude	100% of range I, best resolution 6 ppm





OrigaCorr
Field Device
Potentiostat
Galvanostat

OrigaCorr
Made in Know-How



WIFI



DATA



POWER

CONSULT THE CATALOG OF ORIGACORR:



Origacorr



Accurately analyze the corrosion rate *in situ!*

Perform non-destructive measurements of corrosion rates with our field instrument

Easily configure and export your data

Obtain accurate and reliable corrosion rate measurements

Measure corrosion rate on a wide range of materials

APPLICATIONS OF ORIGACORR : CORROSION

- Robust device - resistant and durable: Protection against shocks, dust and splashes
- Easily transportable & easy to use: Stand-alone device (measurement without computer)
- Extended memory (14,500 results in volatile memory)
- Two modes of use (manual / automatic)
- Applicable methods:

Electrochemical impedance spectroscopy (EIS)

Open circuit potential (OCP)

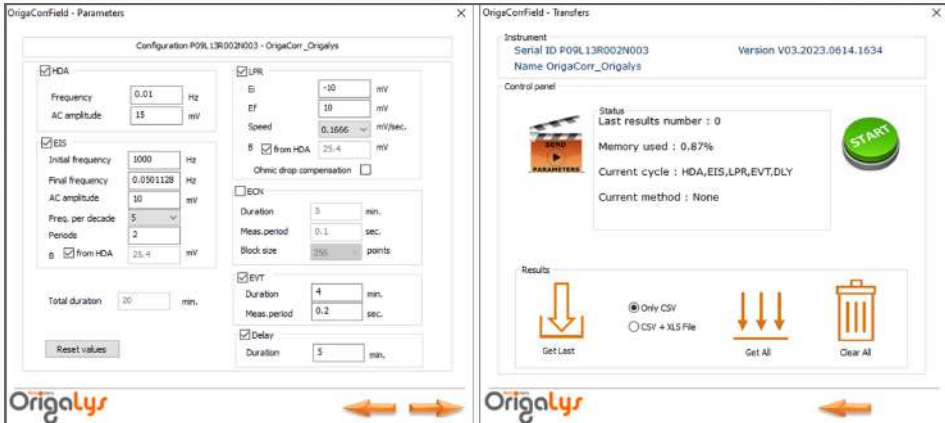
Linear bias resistor (LPR)

Harmonic distortion analysis (HDA)

TECHNICALS SPECIFICATIONS

Electrodes	2, 3 and 4	Potential accuracy	< 0.1 % FSR (Full Scale range)
Max. applied potential	± 5 V	Current accuracy	< 0.1 % FSR
Output voltage	±17.5 V	Current resolution	0.003 % FSR (Best: 30 fA)
Maximum current	± 100 mA	Input impedance	1 TΩ (// 20 pF)
Current ranges	±1 nA to ± 100 mA in 9 decades	Potential bandwidth	1 MHz
Impedance (EIS)	10 μHz to 1 KHz	Computer interface	USB 2.0
PC software (manual mode)	OrigaMaster 5	PC software (automatic mode)	OrigacorrField

OrigaCorrField



OrigaCorr_Export - Excel

	A	B	C	D	E	F	G
	Time	Method	Status	Result	Value	Unit	
2	08/06/2023	14:25:10 HDA	OK	B (calculé)	71.49	mV	
3	08/06/2023	14:25:10 HDA	OK	BetaA	336.73	mV	
4	08/06/2023	14:25:10 HDA	OK	BetaC	322.03	mV	
5	08/06/2023	14:25:10 HDA	OK	Vcorr	107.4	µm/Y	
6	08/06/2023	15:38:54 HDA	OK	B (calculé)	101.19	mV	
7	08/06/2023	15:38:54 HDA	OK	BetaA	468.07	mV	
8	08/06/2023	15:38:54 HDA	OK	BetaC	463.65	mV	
9	08/06/2023	15:38:54 HDA	OK	Vcorr	151.6	µm/Y	
10	08/06/2023	16:37:56 EIS	OK	B (Utilisé)	25.4	mV	
11	08/06/2023	16:37:56 EIS	OK	R1	4.709e+002	Ohms/cm ²	
12	08/06/2023	16:37:56 EIS	OK	R2	7.110e+003	Ohms/cm ²	
13	08/06/2023	16:37:56 EIS	OK	Vcorr(R2)	41.37	µm/Y	
14	08/06/2023	16:37:56 EIS	OK	Vcorr(R1+R2)	38.80	µm/Y	
15	08/06/2023	16:37:56 EIS	OK	C	4.477e-006	F/cm ²	
16	08/06/2023	16:38:47 LPR	OK	B (Utilisé)	25.4	mV	
17	08/06/2023	16:38:47 LPR	OK	Rp	7.346e+003	Ohms/cm ²	
18	08/06/2023	16:38:47 LPR	OK	Ecorr	-0.10	mV	
19	08/06/2023	16:38:47 LPR	OK	Vcorr	40.03	µm/Y	
20	08/06/2023	16:40:28 EVT	OK	Ecorr	0.37	mV	
21	08/06/2023	16:40:11 EIS	OK	B (Utilisé)	25.40	mV	
22	08/06/2023	16:49:11 EIS	OK	R1	4.721e+002	Ohms/cm ²	
23	08/06/2023	16:49:11 EIS	OK	R2	7.108e+003	Ohms/cm ²	
24	08/06/2023	16:49:11 EIS	OK	Vcorr(R2)	41.39	µm/Y	
25	08/06/2023	16:49:11 EIS	OK	Vcorr(R1+R2)	38.81	µm/Y	
26	08/06/2023	16:49:11 EIS	OK	C	4.478e-006	F/cm ²	
27	08/06/2023	16:50:02 LPR	OK	B (Utilisé)	25.4	mV	
28	08/06/2023	16:50:02 LPR	OK	Rp	7.282e+003	Ohms/cm ²	
29	08/06/2023	16:50:02 LPR	OK	Ecorr	-0.03	mV	
30	08/06/2023	16:50:02 LPR	OK	Vcorr	40.40	µm/Y	
31	08/06/2023	16:51:02 EVT	OK	Ecorr	0.40	mV	

Using the OrigaCorr in automatic mode

- Quick and easy to configure
- Guided setup
- Automatic execution of measurements
- Export your results with Excel



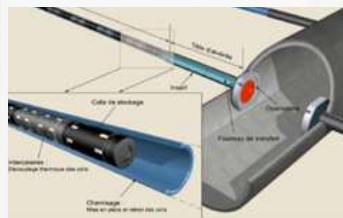
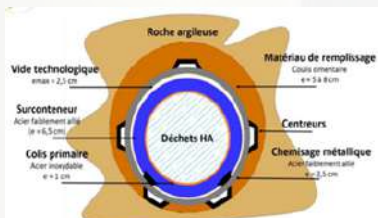
SCCoDRa PROJECT



Monitoring and Control of Corrosion of metallic components for the storage of Radioactive Waste



Partners:



Principle of waste storage on the Bure site

Development of innovative techniques for controlling and monitoring the corrosion of metallic components



CONSULT THE ORIGASTAT MANUAL:



OrigaMμ

The most sensitive Low Current Potentiostat



The OrigaMμ allows to perform very low current measurements of the following instruments:

- OrigaStat: OGS100 and OGS200
- OrigaFlex: OGF and OGF⁺

Maximum resolution: 30 attoAmpere

LE FONCTIONNEMENT

This low current potentiostatic probe can be used alone (manual mode) or connected (remote mode) to an OrigalyS' instrument.

TECHNICALS SPECIFICATIONS

Electrodes	2 or 3	Accuracy	< 0.1 % FSR (Full Scale Range)
Max. applied potential	±2 V (Remote mode) ±1 V (Manual mode)	Use	Connected or alone
Compliance voltage	±7 V	PC software	OrigaMaster
Current ranges Remote mode: 5 Manual mode: 3	±1 pA, ±10 pA, ±100 pA, ±1 nA and ± 10 nA ±100 pA, ± 1 nA and ±10 nA	Compatibility	OGS100 & OGS200 OGF500, OGF01A OGF05A & OGF10A
Best resolution	30 aA		



CONSULT THE ORIGATROD CATALOG:





OrigaTrod kit

Rotating Disk
Electrode (RDE)

Radiometer's EDI101 and
CTV101 Legacy
(same designer)

Fully compatible with tips from Radiometer

OrigaTrod

- RDE
- 100 to 10,000 rpm
- Accuracy: 0.35%

OrigaBox

- Speed Controller
- With PC software
- Resolution: 0.35%

OPTION : OrigaSwitch – Remote control footswitch



Start & Stop the RDE with foot

Handle your experiment safety

For OrigaStat & OrigaBox

Perfect for glovebox

OrigaTroD kit

A COMPLETE SOLUTION



RDE Stand

This stand is composed by:

- A standard stand:

With a robust base.

The height is easily adjustable.

- A glass cell

The volume can vary, on demand.

This cell can also be thermostated.

With its 5 holes, the cell can fit RDE, counter electrodes, working electrodes and reference electrodes.



100% compatible with Radiometer tips.

OrigaTroD Kit

When the OrigaTroD is used together with the OrigaBox, it is provided with a box. Thus, everything is safely transported.

The kit contains:

- OrigaTroD
- OrigaBox
- USB key, containing the software (PC Control Panel)
- User's manual
- The convenient cords
- The box

Tips, pellets and sample holders are not included.

The case has been designed to be able to transport them easily.

OrigaBox

RDE Speed Controller



- It controls the RDE speed rotation
- USB or analog consign or RS232 control
- Can be used alone or connected to a potentiostat

By using a potentiostat from:

OrigaLys



1st solution MANUAL CONTROL

Thanks to the software from OrigaLys: OrigaBox Interface. Connected with USB.

2nd solution AUTOMATIC CONTROL

The speed rotation is controlled by OrigaMaster: the software which controlled the potentiostat.



Other brands



The speed rotation is controlled by the software which controlled the potentiostat.

An analog signal or RS232 is required from the potentiostat, consult us.



OrigaTrod Lt

An easy solution

Rotating Disk Electrode with a built-in Speed Controller

Suitable to any kind of other brands of potentiostats

Compatible with tips from Radiometer-Hach

From 100 to 5,000 rpm



Potentiometer

Monitoring manually the rotation speed of the OrigaTrod and directly on the device.

External Power Supply

The system needs to be directly supplied by a standard AC / DC switching adaptor 12 V output.





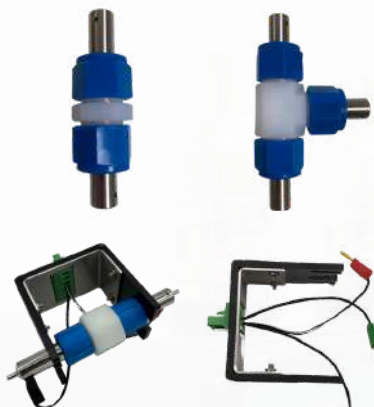


CONSULT THE ORIGINALINE CATALOG:



BATTERY HOLDERS FOR ORIGAFLEX

Holders / Swagelok (2 electrodes - 3 electrodes)



Specifications:

- Suitable for potentiostats from the OrigaFlex range
- Connectors: banana $\varnothing 2\text{mm}$
- Internal diameter: $\varnothing 12,7$ or $\varnothing 6,35$ mm
- Materials: Stainless steel
- Operating temperature: -30°C to 80°C

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



Coin cell holders - AA / AAA - super capacitor



Specifications - Coin cell holder:

- Suitable for potentiostats from the OrigaFlex range
- Easily removable from the device
- Length: 80 mm
- Width: 32 mm
- Temperature sensor
- 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



Suitable for OrigaFlex

IDEAL SOLUTION FOR BATTERY FIELD

CONCEPT:

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

- Connectors: BNC
- Max voltage: ± 15 V
- Real time monitoring
- Available in OM5 & OV2
- Compatible with: OrigaFlex range OGS100 & OGS200



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

Sample Holders

Pellets from OrigaLys can be used with a sample holder, which can be adapted on the RDE (OrigaTrode). The material is PEEK (PolyEther Ether Ketone).

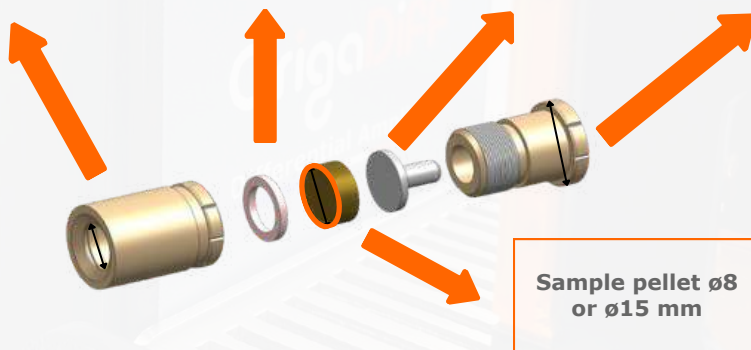
Product No.	Ø8 mm: E110GL001CIAL Ø15 mm: E110GL006CIAL
Temperature range	-10 to 105°C
Length	17 mm

Sample holder active area
Ø6 or Ø13 mm

O-ring in silicone
Ø6 or Ø13 mm

316L contact

Sample holder outer diameter
Ø11 or Ø19 mm



TO BE USED WITH RDE AND STATIC ELECTRODE



OrigaTrode
OrigaLys' RDE



EDI101
Radiometer's RDE



OrigaTrode Lt
RDE with potentiometer



StaTrode
Static Electrode

Tips

Tips from OrigalyS can be used with our RDE (OrigaTrod) and with the Static Electrode (StaTrod) but also with most of other RDE on the market.

Length	20 mm
Outside diameter	11 mm
Material	PEEK (PTFE on demand)



For example:
Glassy Carbon
Ø3 mm

AVAILABLE TIPS: Ø1, 2, 3 OR 5 MM

Materials	Diameter (mm)	Materials	Diameter (mm)
316L Stainless	2 and 5	Nickel	2 and 5
70% Copper and 30% Nickel	5	Nickel, 99.99% purity	5
Silver	2 and 5	Peek	0
Carbon Steel XC38	5	Platinum	2 and 5
Copper	2 and 5	Platinum, 99.99% purity	5
Glassy Carbon	3 and 5	Tin	5
Gold	2 and 5	Titanium	2 and 5
Aluminium	3 and 5	Tungsten	1
Iron	5	Zinc	2 and 5

Contact us for more information regarding the following tips: Chrome (Cr), Irridium (Ir), Palladium (Pd), Rhodium (Rh), Cobalt (Co) or any other materials.

TO BE USED WITH RDE AND STATIC ELECTRODE



OrigaTrod
OrigalyS' RDE



EDI101
Radiometer's RDE



OrigaTrod Lt
RDE with potentiometer



StaTrod
Static Electrode

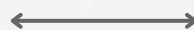
Pellets

To be inserted in the sample-holder, Originalab provides a whole range of sample pellets.

Thickness	BDD: 1 mm Other pellets: 3 mm
Diameter	8 or 15 mm

AVAILABLE PELLETS: Ø8 OR 15 MM

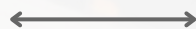
Materials	Diameter (mm)
A37	8
AISI430 Stainless	8 and 15
316L Stainless	8 and 15
Z30Cr13 Stainless	15
Aluminium	8
Silver	8
Glassy carbon	8 and 15
Copper	8 and 15
Boron Doped Diamond (BDD)	8 and 15
Iron	8
Graphite	8
Nickel	8 and 15
Gold	8
Platinum	8
Tungsten	8



15 mm

316 L Stainless steel

Ø15 mm



8 mm

DDB

Ø8 mm



POLISHING KIT



Access the
instructions for use:



Read more:



Consult our catalog of electrodes and accessories:



Origalys Catalog

Origalys ElectroChem SAS
Made in Know-How

Accessories for electrochemical
analytical systems systems

Origalys 13
years of experience



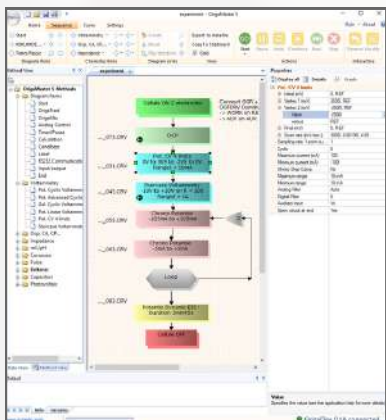


Electrochem
Originalys

The Origasoft Range

3

SOFTWARE ACCORDING TO YOUR NEEDS



OrigaMaster

Dedicated to single-potentiostat.
Windows interface. Fully compatible with Windows 8 and 10.



Compatibility with OrigaStat, OrigaFlex and OrigaCorr ranges.

OrigaViewer



Dedicated to multi-potentiostat.
Windows Interface. Fully compatible with Windows 8 and 10.

Compatibility with OrigaFlex range.

OrigaBox Interface



It allows to control the speed of the RDE and the magnetic stirrer.

Windows Interface. Fully compatible with Windows 8 and 10.

Compatibility with:

- OrigaBox: Rotating Disk Electrode (OrigaTrod)
- Magnetic agitator (OrigaMix).

XP, Vista and 7 are no longer maintained by Microsoft company.
OrigaLys would not be liable if the software were to malfunction.

Interactive methods

Parameters can be changed during the measurement

OrigaMaster

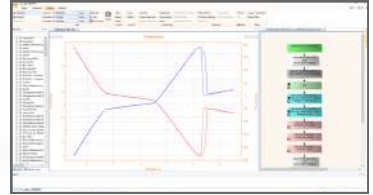
	OrigaStat	OrigaFlex
	VOLTAMMETRY	
Pot. Cyclic Voltammetry (CV)	Yes	
Pot. Advanced Cyclic Voltammetry	Yes	
Gal. Cyclic Voltammetry	Yes	
Pot. Linear Voltammetry	Yes	
Pot. CV 4 limits	Yes	
Stripping Voltammetry	Yes	
Staircase Voltammetry (SCV)	Yes	
	CHRONO	
Open Circuit Potential (OCP)	Yes	
Chrono Amperometry (CA)	Yes	
Chrono Amperometry Expert	Yes	
Chrono Coulometry (CC)	Yes	
Chrono Potentiometry (CP)	Yes	
Chrono Potentiometry Expert	Yes	
Single Chrono Amperometry	Yes	
	IMPEDANCE (with OGF EIS / OGF⁺ EIS)	
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	Yes (with EIS)
Zero Resistance Ammeter (ZRA)	Yes (not with OGS080)	Yes (OGF ⁺ & OGF ⁺ EIS)
	PULSE	
Pot. Differential Pulse (DPV)	Yes	
Gal. Recurrent Differential Pulse	Yes	
Pot. SW Voltammetry (SWV)	Yes	
Potentiometric Stripping Analysis (PSA)	Yes (not with OGS080)	Yes (OGF ⁺ & OGF ⁺ EIS)
	BATTERIES, SUPER CAPACITORS and PHOTOVOLTAIC	
Single Charge or DisCharge	Yes	
Gal. Charge and DisCharge Cycle (GCD)	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	
	pH and mV measurement	
pH fixed Calibration	Yes (not with OGS080)	No
pH auto Calibration	Yes (not with OGS080)	No
pH measurement	Yes (not with OGS080)	No
mV measurement	Yes (not with OGS080)	No

OrigaMaster

Easy to use and licence free.



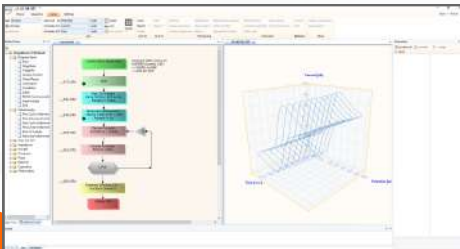
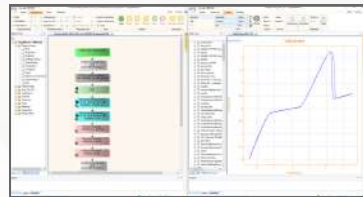
OrigaMaster - OM5



Interactive methods
Changing scales in real time
Overlaying without limit

- Windows Interface
- Easy graphic programming
- Up to 10,000 cycles
- Zooming in real time
- Export data to Excel, Open Office, Regressi etc.

Opening two OrigaMaster or more at the same time



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



OriginaViewer

Easy to use and licence free.



OriginaViewer

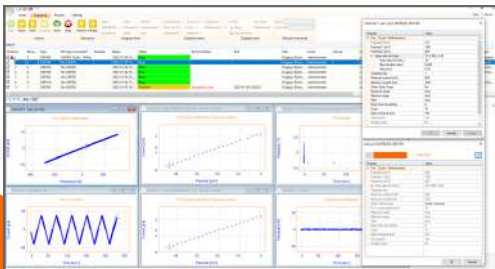


Independent and simultaneous measurements
Temperature control & safety criteria
Interactive methods

- Windows interface
- Save and store all the experiment conditions
- 3 levels of users:
Administrator, Supervisor and Operator



The software is protected with ID and password



- Recoverable data thanks to a buffer inside the instrument
- No point or time limitation
- Expert mode
- Customization

Interactive methods

Parameters can be changed during the measurement

OrigaViewer

	OrigaFlex
	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 (with OGFEIS / OGF⁺EIS)
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 (with OGF ⁺)
Zero Resistance Ammeter (ZRA)	Yes (with OGF ⁺)
	PULSE
Pot. Differential Pulse (DPV)	Yes
Gal. Recurrent Differential Pulse	Yes
Pot. SW Voltammetry (SWV)	Yes
Potentiometric Stripping Analysis (PSA)	No
	BATTERIES, SUPER CAPACITORS and PHOTOVOLTAIC
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

OrigoBox Interface

Speed Controller Software - Easy to use and licence free



Connected together with 6-pin DIN cable



USB



How to use

- Windows interface
- Speed constant adjustable to control other kind of RDE
- Easy "Start and stop"
- Accurate speed thanks to an optical encoder

Setting the speed



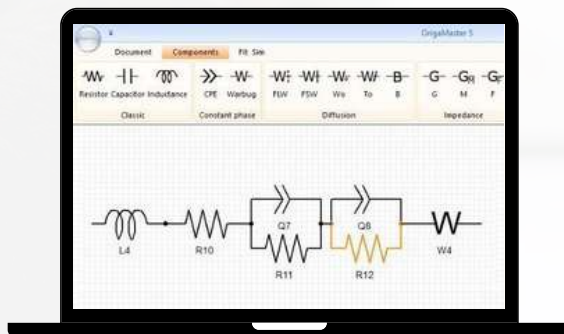
Controlling one OrigoTrod or more on the same PC is possible



- 0.35% digital resolution
- With analog signal, the speed rotation is controlled by potentiostat from other brands

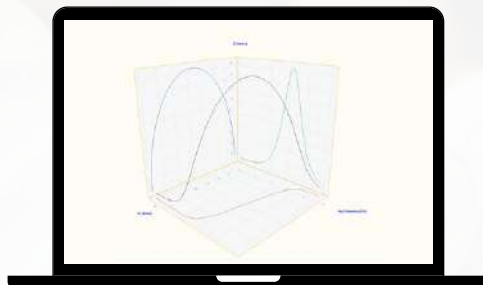
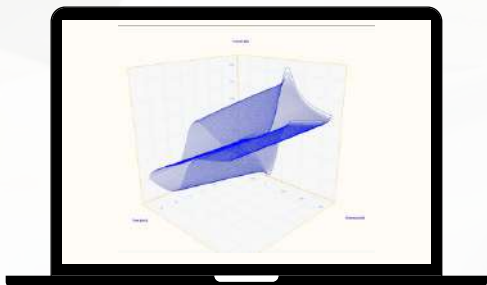
Equivalent circuit tool

The incomparable tool for studying equivalent circuits!



Theoretical curve tracing tool / Fit & Simulation
Chi square calculation (chi-square) χ^2

3D curves



Visualize your curve in 3D!

Mouse manipulation of the view

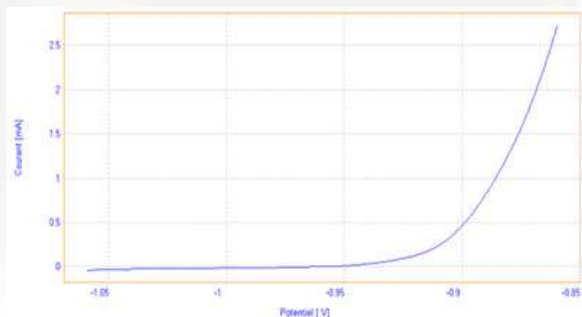
Automatic animation of the view, rereading of the curve

Electrochemical methods

Polarization for Corrosion (Tafel)

The Polarization for corrosion tests is a linear voltammetry method at scan rates from 2 mV/sec down to 0.0166 mV/sec. The achieved polarization curves can be processed under Tafel Analysis giving practical information like as:

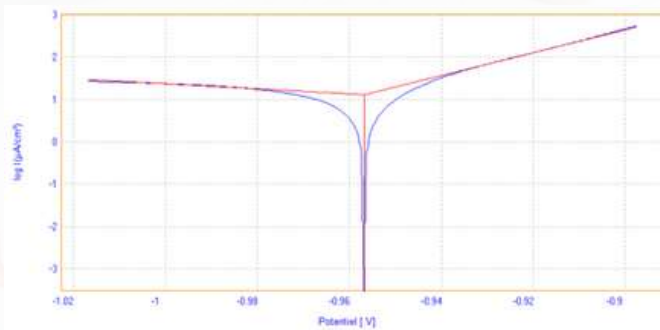
- Potential of corrosion
- Corrosion current
- Resistance of polarization
- Corrosion rate (mm/Y)



Résultats	
E(j=0) :	-278.8 mV
Rp :	99.78 kohm.cm ²
i corr. :	31.2445 nA/cm ²
Ba :	35.7 mV
Bc :	-41.4 mV
Coef. :	0.9986
Corrosion:	365.44 nm/Y

Linear voltammetry of steel in [NaCl] = 0.7 M

Consult the corrosion catalog:

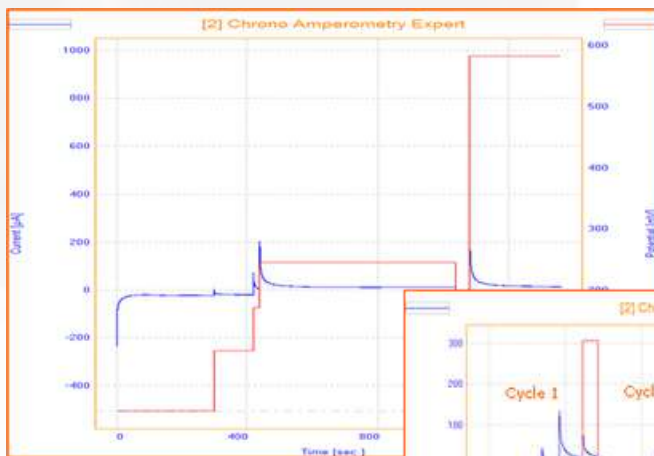


Tafel analysis on steel in [NaCl] = 0.7 M

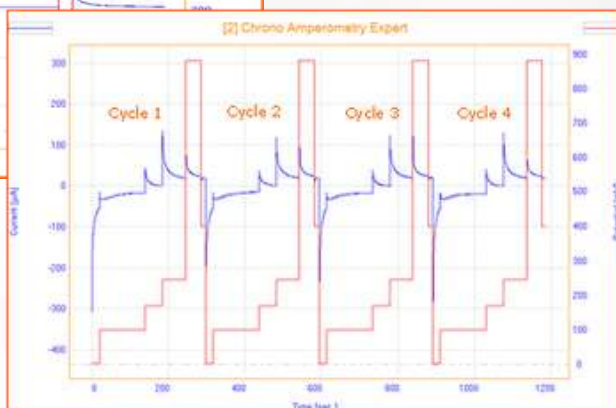
Electrochemical methods

Chrono Amperometry Expert Method

Chronoamperometry is a potentiostatic method with large range of applications. In this method, a fixed potential will be imposed on the working electrode during defined duration and the current will be measured. In "Chronoamperometry Expert" method, there are several potential steps (maximum 8) which could be defined with different parameters. In each step, potential could be imposed relative to potential of REF, OCP or LAST in different time durations. All these different steps could be repeated thanks to definition of cycle number on the software.



Chrono Amperometry Expert on ferri-ferro cyanide 5 mM





The OriginMeter range

Benchtop & Industrial pH-meters

OpH218

OpH228



Radiometer's PHM210 and PHM220 Legacy
(same designer)

Sustainable and repairable

Reliable and fast results

Easy to use and simple connections

Data transfers (Regressi, ExAo, Excel)

OpH228: Programmable measurements - customizable calibration

Benchtop Conductivity Meter

Radiometer's CDM210 legacy (same designer)

OCD218



Sustainable and repairable

Reliable and fast results

Easy to use and simple connections

Data transfers (Regressi, ExAo, Excel)

OpH218

Benchtop pH-meter



**Radiometer's
PHM210 Legacy
(same designer)**

- Sustainable and repairable**
- Reliable and fast results**
- Easy to use and simple connections**
- Data transfers (Regressi, ExAo, Excel)**

PERFECT FOR TEACHING

- Easy to use interface
- Perfect specifications for teaching
- Design to last
- 5-year warranty
- Compatible interface to Radiometer pH-meters

TECHNICALS SPECIFICATIONS

pH range	-9 to 23 pH	°C resolution	±0.1 °C
mV range	±2000 mV	Measures	Continous or automatic
°C	-10°C to 110°C	Buffers	1 to 3
pH resolution	±0.01 pH	Choosing buffers	Automatic / Handbook selection / Manual
mV resolution	±0.1 mV	Criteria for agreeing to calibration	<ul style="list-style-type: none"> • Slope: 95 to 102 % • Zero-pH : 5.80 to 7.50 pH Non-blocking criteria generating a warning



Oph228

Benchtop pH-meter

**Radiometer's
PHM220 Legacy
(same designer)**

Sustainable and repairable

Reliable and fast results

Easy to use and simple connections

Data transfers (Regressi, ExAo, Excel)

Measurement history (quality control - customizable measurements (calibration))

PERFECT FOR INDUSTRY

- **GLP menu (Good Laboratory Practice): traceability of measurements**
- **Calibration assistance**
- **Easy to use interface**
- **Perfect specifications for industrial purposes**
- **Design to last**
- **5-year warranty**

TECHNICALS SPECIFICATIONS

pH range	-9 to 23 pH	°C resolution	±0.1 °C
mV range	±2000 mV	Measures (pH + mV : potential)	Continuous, automatic or at intervals
°C	-10 °C to 110 °C	Buffers	1 to 4
pH resolution	±0.01 pH	Choosing buffers	Automatic / Handbook selection / Manual
mV resolution	±0.1 mV	Criteria for agreeing to calibration (editable and customizable)	Default settings: <ul style="list-style-type: none"> • Slope: 95 à 102% • Zero-pH : 5.80 to 7.50 pH Non-blocking criteria generating a warning

Oph218 Packs

Non-combined Calomel Pack



This pack includes:

- pH-meter Oph218
- BNC-S7 cable
- Banana-S7 cable
- One pH electrode
- One Calomel reference electrode

Non-combined Ag/AgCl Pack



This pack includes:

- pH-meter Oph218
- BNC-S7 cable
- Banana-S7 cable
- One pH electrode
- One Ag/AgCl reference electrode

Epoxy Combined Pack



This pack includes:

- pH-meter Oph218
- BNC-S7 cable
- One combined pH electrode in epoxy

Glass Combined Pack



This pack includes:

- pH-meter Oph218
- BNC-S7 cable
- One combined pH electrode in glass

OpH²¹⁸ Testimonies

“

We find the pH meter ergonomic, very easy to use and qualitative aspect. We particularly appreciate the fact that its calibration is not limited in range of errors and cannot prevent measurements.



Lycée Raspail
Paris

“

The pH meter is very easy to use, and it is space-saving. They are very suitable for students in preparatory classes than for high school students.



Lycée Balzac
Paris

“

The range has been improved with the ability to perform calibrations from 100% manual to 100% automatic depending on needs and class levels. The device is space-saving, lightweight and very easy to use.



Lycée Jacques
Decour

“

The OrigaLys OpH²¹⁸ pH-meter is just what we needed: easy to use (just follow the on-screen instructions), easy to store, space-saving. It is the worthy successor of the phm210.



Lycée Michelet
Vanves

OCD218

Benchtop Conductivity Meter



**Radiometer's
CDM210 Legacy
(same designer)**

- Sustainable and repairable**
- Reliable and fast results**
- Easy to use and simple connections**
- Data transfers (Regressi, ExAo, Excel)**

PERFECT FOR TEACHING

- Easy to use interface
- Perfect specifications for teaching
- Design to last
- 5-year warranty
- Compatible interface to Radiometer Conductivity Meters

TECHNICALS SPECIFICATIONS

Conductivity	7 ranges from 0 - 1 000 nS/cm to 0 - 1 S/cm	TDS (Total Dissolved Solids)	4 to 20 mg/l
Resolution	From Rs = 100 pS to 100 µS	Salinity	2 to 42
Temperature	-10°C to 110°C	Calibration	<ul style="list-style-type: none"> • Automatic • Manual • Static
Resistivity	1 Ω.cm to 100 MΩ.cm	Selection range	Automatic: Conductivity, Resistivity, TDS and salinity. Manual: conductivity.

OCD218 Packs

Conductivity meter Pack epoxy



This pack includes:

- One OCD218
- One cable
- One conductivity cell Epoxy body with platinum plates

Conductivity Meter Pack Glass



This pack includes:

- One OCD218
- One cable
- One conductivity cell glass body with platinum plates

Simple Pack



This pack includes:

- One OCD218



Conductivity cells with platinum plates

Models	OGEPOXY002 Type CDC754-9	OGGLASS001 Type XE100
Cell constant (cm ⁻¹)	1.0	1.0
Temperature range	0°C to 100°C	0°C to 80°C
Dimensions	ø 12 x 103 mm	ø 12 x 103 mm
Number of poles	2 replatinables poles	2 replatinables poles
Connection	Screw Head S7	Screw Head S7
Body	Epoxy	Glass

Data transfert Origameter

Analog output and RS232 communication

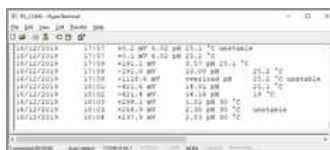
ANALOG OUTPUT



ANALOG OUT

- Connecting to analog recorders
- Controlling a stirrer

RS232 COMMUNICATION



Control with HyperTerminal

- Printing results at the end of calibration
- pH-meter control

USB communication and remote control

USB communication with a PC is provided by a DLL developed and provided by OrigalyS. Full documentation and an example of use with Microsoft Excel (pH collector) software are available for download on www.origalys.com. This allows real-time storage, display and tracing on a graph and pH/mV measurements based on time.



pH collector
-
Microsoft Excel

Electrodes



Reference electrodes					Salt-bridge
Models	OGR005 Type REF321	OGR004 Type REF421	OGR006 Type XR300	OGR003 Type XR110	D110GL008 Type AL120
Dimensions	∅ 8 x 103 mm	∅ 8 x 103 mm	∅ 8 x 120 mm	∅ 8 x 120 mm	∅ 8 x 140 mm
Body	Glass	Glass	Glass	Glass	Glass
Reference	Ag/AgCl	Calomel	Ag/AgCl	Calomel	-
Electrolyte	KCl 3M with saturated AgCl	Saturated KCl	KCl 3M with saturated AgCl	Saturated KCl	-



Combined pH electrodes				Non-combined pH electrodes	
Models	OGPB201 Type pHC2401-8	OGPB202 Type pHC3001	OGPB203 Type pHC3005	OGPB001 Type pHG301	OGPB002 Type pHG311
pH range	0 - 12	0 - 12	0 - 12	0 - 12	0 - 14
T°C range	-5 to 80°C	-5 to 80°C	-5 to 80°C	-5 to 80°C	-5 to 80°C
Dimensions	∅ 12 x 103 mm	∅ 12 x 103 mm	∅ 12 x 103 mm	∅ 12 x 103 mm	∅ 12 x 103 mm
Body	Glass	Glass	Epoxy	Glass	Glass
Reference	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Electrolyte	KCl 3M with saturated AgCl	KCl 3M with saturated AgCl	KCl 3M with saturated AgCl	Saturated KCl	Saturated KCl

Consult our catalog of electrodes and accessories:



Radiometer's Maintenance



Only in the European Union



As former designers of Radiometer and Tacussel, we are able to give you a repair diagnostic of all your instruments from Radiometer Analytical and Tacussel:

- VoltaLab Range : such as PST006, PGZ100, PGP201, PST050, PGZ301 or PGZ402.
- EDI101 and CTV101.

General services



Training day

OrigaLys offers its expertise and know-how to enable you to be more competitive and efficient or train you to the use of OrigaLys' devices in your business or research.

Do not hesitate to consult us if you have any needs in the following areas:

- Electrochemistry
- Batteries
- Corrosion
- Coatings



Personalization

The accessory or the device, you are looking for, does not exist yet? You do not find the device which fits your needs ?

- OrigaLys can design, with you and for you, a special equipment.
- From the first specifications to the final products, we are by your side.
- We can create, with you and then implement, a customized method into our software.

Origa**box** Compatibility

	OGS080	OGS100	OGS200	OGF500 OGF01A OGF05A OGF10A	OGF ⁺ 500 OGF ⁺ 01A OGF ⁺ 05A OGF ⁺ 10A	OGF ⁺ 500EIS OGF ⁺ 01AEIS OGF ⁺ 05AEIS OGF ⁺ 10AEIS
OrigaTroD	✓	✓	✓	✓	✓	✓
OrigaBox	Built-in	Built-in	Built-in			
OrigaTroD Lt	✓	✓	✓	✓	✓	✓
OrigaMix	✓	✓	✓	✗*	✗*	✗*
OrigaMµ	✗	✓	✓	✓	✓	✓
OrigaBoost	✗	✓	✓	✗	✗	✗
OGFEIS	✗	✓	✓	✓	✓	Built-in
OrigaCell Kit	✓	✓	✓	✗	✗	✗
T°C probe	✗	✓	✓	✓	✓	✓
Battery holders	✗	✗	✗	✓	✓	✓
OrigaTest	✓	✓	✓	✓	✓	✓
OrigaMux	✗	✗	✗	✓	✓	✓
OrigaDiff	✗	✗	✗	✓	✓	✓
OrigaSwitch	✗*	✓	✓	✗*	✓*	✓*

*Only with Origa**Box** (speed controller)

Examples of compatibilities



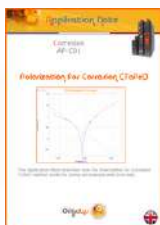
①
OGS100
+
OGFEIS
+
OrigaCell Kit



②
OGS100
+
OrigaTroD
+
OrigaCell Kit

More information

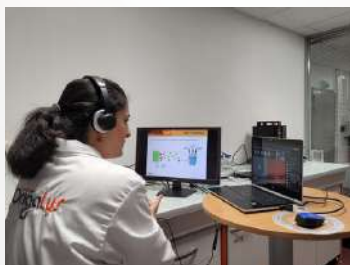
Access our application notes on www.origalys.com:



Join us on our YouTube channel!



OrigaWebinar



Also find us on LinkedIn!



More information

BIOMETRIZ - BIOFILM ANALYSIS

Find out more about the OrigaLys subsidiary:



TEACHING PRIZE

For 14 years, OrigaLys has encouraged innovation in the teaching of electrochemistry with the teaching prize awarded during the Electrochemistry Days.



Teaching Prize 2022

In 2022, the prize was equipped with 4 OpH218 and 4 precision OCD218, intended for teaching. In agreement with the Société Chimique de France and following the events in Ukraine, it was decided to reserve this donation to the Taras Shevchenko National University in Kyiv.

ORIGA-DAY: Training by OrigaLys



Are you a doctoral student? Searcher? Industrial?



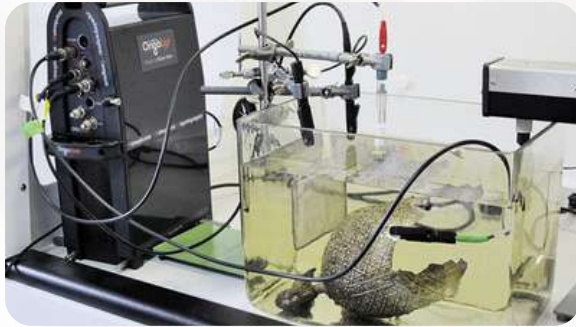
Would you like to come and present your research topic, thesis or your project during a scientific day?

Contact us at the following address: event@origalys.com 

“

CLEANING ARTEFACTS

“The miracles of the Electrochemistry”



**Haute Ecole Arc Conservation - Restauration
Neuchâtel, Switzerland **



Read more:

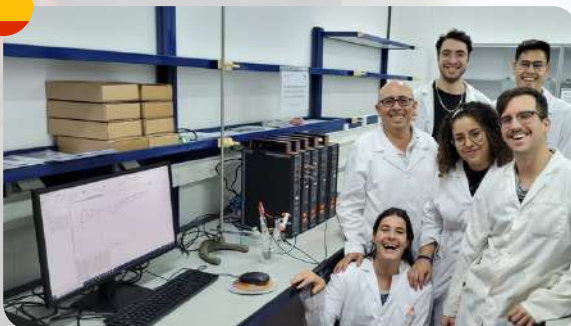


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HYDROGEN TECHNOLOGIES AND ENERGY STORAGE

« We can use the modules independently or in combination, which provides a lot of flexibility »

The versatility of the OrigaFlex system was what most attracted our attention. We have a Multichannel OrigaLys system for use in the evaluation of catalysts for fuel cells, batteries, electrolysis and photoelectrochemical processes. We can use the modules independently or in combination, which provides a lot of flexibility. Our master's and doctoral students are enthusiastic because both the software and the operation of the equipment are very user-friendly.



 Universidad
de La Laguna

University of La Laguna - Tenerife, Spain



AR01228 - 01/03/2024

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