# pH-meter OpH218

# **OrigaMeter range**



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

OrigaLys was founded by four R&D engineers from Radiometer company.





# Easy to use

Power the pH-meter by pressing the button to the right of the screen

The home screen lights up, with time display

Origanieter

Origanieter

Origanieter

17:02 by Origaty

Origalys

Pressing one of the keys on the keyboard, the pH/mV measurement screen in continuous mode appears:



### **Function keys:**

Each key is associated with a function defined in a white rectangle at the bottom of the screen.

In our example the left key allows you to enter the **MENU** to access the other functions of the device. The right key allows you to switch to potential (**mV**).

## Adjustment and navigation keys:

These keys allow you to move around menus, select a setting, or adjust the value of a variable.

In our example, **horizontal** arrow keys allow you to select the **Continuous** or **Auto** measurement mode. **Vertical** arrow keys adjust the temperature value.

# Connecting the electrodes

# Example of using a non-combined pH electrode Check out our various Packs on page 7



When the device is turned off, the electrodes are automatically de-connected from the electronics and can remain plugged in without the risk of being damaged.

### Temperature probe

Reference: OGT-103-7-5-CINCH-CIAL

RCA-RCA cord Supplied with the probe

**NOTE:** You can use your own temperature sensor.



### Reference electrode

Reference: OGR004

Banana – S7 cord Reference: AR01206

### Non-combined pH Electrode

Reference: OGPH001

BNC – S7 cord Reference: AR01210

### Connection to the ground:

The basic OpH218 allows measurements to be made in floating mode. To connect it to the earth, simply connect it to a device such as a printer, recorder or PC, which is itself connected to the earth.

# Data transfer

## **Analog output and RS232 communication**

### Analog output

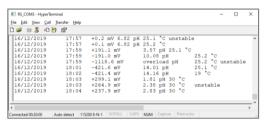
- ✓ Connecting to analog recorders
- ✓ Controlling a stirrer



ANALOG OUT

### RS232 communication

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



Control with HyperTerminal

## **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 <a href="https://www.origalys.com">www.origalys.com</a>. This allows real-time storage, display and tracing on a graph and pH/mV measurements based on time.



pH collector - Microsoft Excel



# Technical Features

	pH: - 9 to 23 pH			
Measurement ranges	mV: ± 2000 mV			
	°C: - 10°C to 110°C			
Resolution	pH: ± 0,01 pH			
	mV: ± 0,1 mV			
	°C: ± 0,1°C			
Electrode entry impedance	> 2 x 10 <sup>12</sup> Ohms			
Polarization electrodes	It is possible to impose a current of 10 $\mu\text{A}$ in the connected electrode on the BNC input			
Stability criterion	3 mV/min ( $\underline{\sim}$ 0,05 pH/min )			
Measures	2 modes :     Continuous: Continuous display of pH/mV and temperature     Automatic: The pH result is frozen and memorized when the drift is below the stability criterion.			
Calibration	1 to 3 points			
Choosing buffers	<ul> <li>3 modes:</li> <li>Automatic recognition of buffers (Series: IUPAC or 4-7-10)</li> <li>Handbook selection of buffers among the series IUPAC and 4-7-1</li> <li>Free by manual adjustment of pH value</li> </ul>			
Criteria for agreeing to calibration	<ul> <li>Slope: 95 to 102%</li> <li>Zero-pH: 5.80 to 7.50 pH</li> <li>Non-blocking criteria generating a warning</li> </ul>			
Languages	French, English, Spanish, German and Italian			
Display	Chart 128x64, OLED Technology, Size 60 x 30 mm			
Input / Output	<ul> <li>1 input for glass electrode or combined (BNC socket)</li> <li>1 input for reference electrode (TAKE BANANE 4 mm)</li> <li>1 input for temperature sensor (take RCA / CINCH)</li> <li>1 RS232 series port (take SUB-D 9 pins)</li> <li>1 USB 2.0 port (type B socket)</li> <li>1 analog output (take mini-DIN8)</li> </ul>			
Box	Project-resistant and dirt-resistant (INOX - PC - PMMA)			
Dimensions (H x W x D)	80 x 140 x 180 mm			
Weight	1 Kg			
Power	<ul><li>2 possibilities:</li><li>By AC adapter 12Vdc, 1A, 12W (JACK plug)</li><li>By USB 2.0 port (type B socket)</li></ul>			
Environmental conditions	<ul><li>Temperature of use: 5 to 40°C</li><li>Relative use humidity: 20 to 80%</li></ul>			

# Accessories



	Other				
Models	① OGR005 Type REF321	② OGR004 Type REF421	③ OGR006 Type XR300	<b>④</b> OGR003 Type XR110	⑤ D11OGL008 Type AL120
Dimensions	ø 8 x 103 mm	ø 8 x 103 mm	ø 8 x 120 mm	ø 8 x 120 mm	ø 8 x 140 mm
Body	Glass	Glass	Glass	Glass	Glass
Reference systems	Ag/AgCl	Calomel	Ag/AgCl	Calomel	-
Electrolyte	KCl 3M with saturated AgCl	Saturated KCI	KCI 3M with saturated AgCl	Saturated KCI	-



	Combined p	Non-combined pH electrodes			
Models	① OGPH201 Type pHC2401-8	© OGPH202 Type pHC3001	③ OGPH203 Type pHC3005	◆ OGPH001  Type pHG301	⑤ OGPH002 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	ø 12 x 103 mm	ø 12 x 103 mm	ø 8 x 103 mm	ø 8 x 103 mm	ø 8 x 103 mm
Body	Glass	Glass	Ероху	Glass	Glass
Reference systems	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Electrolyte	KCl 3M with saturated AgCl	KCI 3M with saturated AgCl	KCI 3M with saturated AgCl	Saturated KCI	Saturated KCI



# **pH-meter Packs**

### Non-combined Calomel Pack

### pH-meter OpH218



- ✓ Two cables
- ✓ One pH electrode
- ✓ One Calomel reference electrode

### **Epoxy Combined Pack**

pH-meter OpH218



- ✓ One cable
- ✓ One combined pH electrode in epoxy

### Non-combined Ag/AgCl Pack

### pH-meter OpH218



- ✓ Two cables
- ✓ One pH electrode
- ✓ One Ag/AgCl reference electrode

### **Glass Combined Pack**

### pH-meter OpH218



- ✓ One cable
- ✓ One combined pH electrode in glass

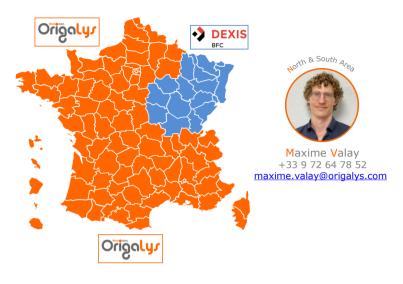
# **Teaching Pack**



## OrigaStat - OGS080: Potentiostat, Galvanostat & EIS

- Highlighting slow and fast systems
- Observation of the diffusion level and the influence of agitation with the rotating electrode
- · Study of the field of electrochemical inertia of solvent
- Study of the concepts of batteries, electrolyters and accumulators
- Go further in TIPE with corrosion studies

### > The team in France





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## > The distributor network





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We are looking for distributors. Please, contact us directly

AR01301 - 01/02/2021

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