



# ProfiLine Handhelds

For pH, ISE, Dissolved Oxygen and Conductivity

HUBERLAB. AG  
Industriestrasse 123  
4147 Aesch

T 061 717 99 77  
F 061 711 93 42

[www.huberlab.ch](http://www.huberlab.ch)  
[info@huberlab.ch](mailto:info@huberlab.ch)



a xylem brand

**HUBERLAB.**

committed to science

# ProfiLine

## Single Parameter Instruments

Data-logging

Mobile Lab

Measurements

Communication

Communication

Surface waters

Quality

Ground Water

Fishfarming

Wastewater

Measurements

Mobile Lab



### 3110 Series: Functional and easy-to-use

For people who want a reliable, simple and easy-to-use portable pH meter, the **pH3110** is the right choice.

- Robust meter housing plus 100 % waterproof and easy-to-clean keypad
- Keys with tactile feedback for error-free operation
- Built-in calibration timer for reliable results

For conductivity measurement the **Cond 3110** is available with a 2- or 4-electrode cell for general purpose applications.

Ease-of-use guarantees dependable results whether measuring surface water or the chemical process.

### Easy-to-clean



Robust sealed silicone keypad - 100% waterproof





## 3210 Series: Convenient and versatile

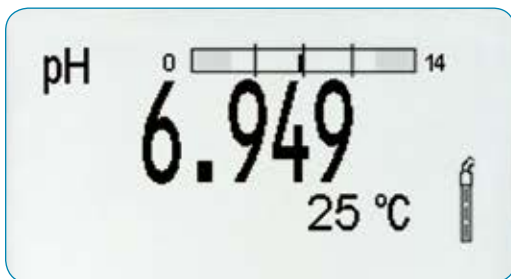
Do you perform measurements in a variety of applications? Are different sensors necessary? Is recording of single values required? Then a meter from the 3210 series is the right answer to these questions.

- Backlit graphic display for best readability even under extreme lighting conditions
- The CMC function ensures reliability to all pH readings
- Plain text menus guarantee comfortable and easy operation

The **Oxi3210** and the **Cond3210** allow flexibility to connect different sensors for application specific measuring.

The **Oxi3205** is an excellent easy-to-use D.O. instruments with a backlit graphic display - ideal for applications like fish farming.

Secures your measurement range



The CMC function (Continuous Measurement Control) of a pH 3210/3310 informs you whether you are measuring inside the calibrated range. An alert is given as soon as you are outside the limits.



Waterproof USB interface



100 % waterproof USB interface for fast communication with a PC or laptop.

## 3310 Series: High capacity datalogging

The 3310 Series is the best choice where high capacity datalogging is required whether you are measuring pH, D.O. or conductivity: Not only quality but also quantity makes the difference. Besides the measuring features provided with the 3210 series, the measuring instruments **pH3310**, **pH/ION3310**, **Cond3310** and **Oxi3310** have the following advantages:

- Interval controlled datalogging function for up to 5000 records: perfect for long-term recording in the field
- 100% waterproof USB interface for field measurement
- Fast data transfer to laptop or PC

# ProfiLine

## Multi -Parameter Instruments

Data-logging

Mobile Lab

Measurements

Communication

Communication

Surface waters

Quality

Ground Water

Fishfarming

Wastewater

Measurements

Mobile Lab



### pH/Cond 3320: Perfect for Process Application

### Water proof socket field

The pH/Cond 3320 with two inputs for pH, mV, ISE and Conductivity measurement is an all-rounder for almost every application in chemical process, Life Science, food and beverages and pharmaceutical industry (Measurement of pH and conductivity according pharmacopeia standards)

- Two inputs for simultaneous measurement of pH/mV/ISE and conductivity
- Backlit two channel LCD display
- Suitable for all modern WTW pH, electrodes, combined ISE electrodes and conductivity cells



With waterproof mini USB-B interface for up-to-date data transfer.

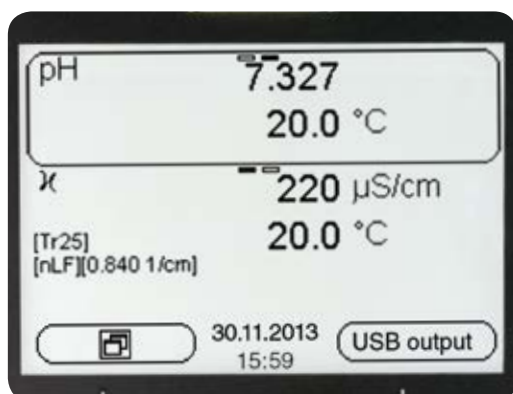


The pH/Cond 3320 has a robust waterproof housing (IP 67) and is equipped with a large memory and a data logging function with an adjustable interval between 1 s and 60 minutes. All records have a time and date stamp as well as an assignable ID number. The waterproof USB interface makes data transfer fast and easy.





Simultaneous measurement



Display with two measured values

## Multi 3320: The Environmental Expert

The Multi 3320 for measurement of pH, ORP, ISE, conductivity and dissolved oxygen (electro chemical) is a perfect meter for environmental applications in ground and surface water, aqua culture, waste water treatment plants and much more. An integrated ISE routine allows also occasional ISE measurement.

- Two inputs for simultaneous measurements of pH and conductivity or pH and dissolved oxygen
- Backlit two channel display
- For all up-to-date WTW pH electrodes, combined ISEs, conductivity cells and galvanic oxygen sensors



The Multi 3320 has a robust waterproof housing (IP 67) and memory with data logger with adjustable interval between 1 s and 60 minutes. The keypad can also be operated when wearing gloves and is easy to clean under a water jet.



# Technical Data

(all values  $\pm 1$  digit)

Instrument	3110/3205	3210	3310/3320
Calibration memory	current calibration	current calibration	up to 10 calibrations
Celsius/Fahrenheit	yes	yes	yes
AutoRead	automatic	automatic/manual selectable	automatic/manual selectable
Display	Customized LCD, 3205: LCD graphic display, backlit	LCD graphic display, backlit	LCD graphic display, backlit
Data memory	-	manual 200	manual 200/5000 automatic
Logger	-	manual	manual/time controlled
Interface	-	-	USB 1.1
Power supply	4 x 1.5 V AA oder 4 x 1.2 V NiMH-rechargeable battery	4 x 1.5 V AA oder 4 x 1.2 V NiMH-rechargeable battery	4 x 1.5 V AA oder 4 x 1.2 V NiMH-rechargeable battery
Continuous operation time	up to 3000 hours (pH 3110) to 1000 hours/800 hours (Cond 3110/ Oxi 3205: 100 hours with backlit)	up to 100 hours/800 hours w/o backlit	up to 100 hours/800 hours w/o backlit
Protection class	IP 67	IP 67	IP 67

Model	pH 3110	pH 3210	pH 3310, pH/ION 3310, pH/Cond 3320, Multi 3320
pH	-2.0 ... 20.0 $\pm 0.1$ pH -2.00 ... 20.00 $\pm 0.01$ pH -2.000 ... 19.999 $\pm 0.005$ pH	-2.0 ... 20.0 $\pm 0.1$ pH -2.00 ... 20.00 $\pm 0.01$ pH -2.000 ... 19.999 $\pm 0.005$ pH	-2.0 ... 20.0 $\pm 0.1$ pH -2.00 ... 20.00 $\pm 0.01$ pH -2.000 ... 19.999 $\pm 0.005$ pH
mV	$\pm 1200.0 \pm 0.3$ mV $\pm (2000 \pm 1)$ mV	$\pm 1200.0 \pm 0.3$ mV $\pm (2500 \pm 1)$ mV	$\pm 1200.0 \pm 0.3$ mV $\pm (2500 \pm 1)$ mV
ISE (mg/l, $\mu$ mol/l, mg/kg, ppm, %)	-	-	0.000 ... 9.999 (Not pH 3310) 10.00 ... 99.99 100.0 ... 999.9 1000 ... 999999
Temperature	-5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$	-5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$	-5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$
CMC	-	yes	yes
Calibration	1-, 2-, 3 point WTW Technical and NIST Buffer	1-, 2-, 3-, 4-, 5 point WTW Technical NIST and 20 additional buffer sets	1-, 2-, 3-, 4-, 5 point WTW Technical NIST and 20 additional buffer sets pH/ION 3320, pH/Cond 3320, Multi 3320: ISE: 2-7 point

Model	Oxi 3205/Oxi 3210	Oxi 3310
Dissolved Oxygen Concentration*	0.00 ... 20.00 mg/l $\pm 0.5$ % of val. 0 ... 90 mg/L $\pm 0.5$ % of val.	0.00 ... 20.00 mg/l $\pm 0.5$ % of val. 0 ... 90 mg/L $\pm 0.5$ % of val.
Saturation*	0.0 ... 200.0% $\pm 0.5$ % of val. 0 ... 600 % $\pm 0.5$ of val.	0.0 ... 200.0% $\pm 0.5$ % of val. 0 ... 600 % $\pm 0.5$ of val.
Partial pressure*	0 ... 200.0 hPa, 0 ... 1250 hPa. $\pm 0.5$ % of val.	0 ... 200.0 hPa, 0 ... 1250 hPa. $\pm 0.5$ % of val.
Temperature	-5.0 ... 50.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$	-5.0 ... 50.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$
Calibration	CellOx®/DurOx® with calibration vessels	CellOx®/DurOx® with calibration vessels versus external standard
Built-in barometric sensor	yes	yes

\* depending

Model	Cond 3110	Cond 3210	Cond 3310
Conductivity	0.0 ... 1000 mS/cm $\pm 0.5$ % of val.	0.0 ... 1000 mS/cm $\pm 0.5$ % of val.	0.0 ... 1000 mS/cm $\pm 0.5$ % of val.
additionally		0.000 ... 1.999 $\mu\text{S}/\text{cm}$ . $K=0.01$ $\text{cm}^{-1}$ 0.00 ... 19.99 $\mu\text{S}/\text{cm}$ . $K=0.1$ $\text{cm}^{-1}$	0.000 ... 1.999 $\mu\text{S}/\text{cm}$ . $K=0.01$ $\text{cm}^{-1}$ 0.00 ... 19.99 $\mu\text{S}/\text{cm}$ . $K=0.1$ $\text{cm}^{-1}$
Specific resistance	-	0.00 ... 20 M $\Omega$ cm	0.00 ... 20 M $\Omega$ cm
Cell constants	fixed: 0.475 $\text{cm}^{-1}$ , 0.880 $\text{cm}^{-1}$ . calibratable: 0.450 ... 0.500 $\text{cm}^{-1}$ . 0.800 ... 0.880 $\text{cm}^{-1}$	fixed: 0.010 $\text{cm}^{-1}$ calibratable: 0.450 ... 0.500 $\text{cm}^{-1}$ . 0.800 ... 0.880 $\text{cm}^{-1}$ . adjustable: 0.090 ... 0.110 $\text{cm}^{-1}$ . 0.250 ... 25.000 $\text{cm}^{-1}$	fixed: 0.010 $\text{cm}^{-1}$ calibratable: 0.450 ... 0.500 $\text{cm}^{-1}$ . 0.800 ... 0.880 $\text{cm}^{-1}$ . adjustable: 0.090 ... 0.110 $\text{cm}^{-1}$ . 0.250 ... 25.000 $\text{cm}^{-1}$
Salinity	0.0 ... 70.0 (acc. IOT)	0.0 ... 70.0 (acc. IOT)	0.0 ... 70.0 (acc. IOT)
TDS	-	0 ... 1999 mg/l. 0 bis 199.9 g/l	0 ... 1999 mg/l. 0 bis 199.9 g/l
Temperature	-5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$	-5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$	-5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$
T <sub>ref</sub>	20 $^{\circ}\text{C}/25$ $^{\circ}\text{C}$	20 $^{\circ}\text{C}/25$ $^{\circ}\text{C}$	20 $^{\circ}\text{C}/25$ $^{\circ}\text{C}$
Temperature Compensation	nLF	none. nIF. 0.000 ... 3.000 %/K	none. nIF. 0.000 ... 3.000 %/K

## Handy case sets for field applications

The ProfiLine handhelds are available as instruments only, but also as sets supporting individual application requirements.

The case also serves as a small field laboratory.



For more detailed information please order free of charge our catalog **"Lab and Field Instrumentation"** or visit our web site :

**[www.wtw.de/en/produkte/labor](http://www.wtw.de/en/produkte/labor)**

(For convenience use our QR code).



Set in case

## Ordering Information

Model	Description	Order No.
pH 3110 Set 2	Easy-to-operate, robust pH/mV-meter with large LCD-display, for mobile routine measurement. Meter in carry case with pH-sensor SenTix® 41, buffer solution STP 4 and STP 7, stand, beaker, short instruction manual, CD-ROM and batteries.	2AA112
pH 3210 Set 2	Versatile, field proven pH/mV meter with backlit graphic display, for mobile applications. Meter in carry case with pH-sensor SenTix® 41, buffer solution STP 4 and STP 7, stand, beaker, short instruction manual, CD-ROM and batteries.	2AA212
Oxi 3205 Set 3	Easy-to-use, robust D.O. meter with backlit LCD graphic display, for routine measurement. Meter with carry case including galvanic D.O. probe DurOx® 325-3, cleaning solution, electrolyte, exchange membrane head, stand, beaker. Including short instruction manual, CD-ROM and batteries.	2BA103
Oxi 3310 Set 1	Professional, field proven D.O. meter with backlit graphic display for mobile applications including data logger and USB interface. Meter with carry case including galvanic D.O. probe CellOx® 325, cleaning solution, electrolyte, 3 exchange membrane heads, stand, beaker. Including short instruction manual CD-ROM, batteries, driver software for USB, cable.	2BA301
Cond 3110 Set 3	Easy-to-operate, robust conductivity meter with large LCD-display, for mobile routine application for 2- and 4-electrode cells. Meter with carry case including 2-electrode conductivity cell KLE 325, standard solution 1413 µS/cm at 25 °C, stand, beaker, short instruction manual, CD-ROM and batteries.	2CA103
Cond 3210 Set 1	Versatile, field proven conductivity meter with backlit LCD graphic display for mobile applications, for 2- and 4-electrode cells. Meter with carry case including 4-electrode conductivity cell TetraCon® 325, standard solution 1413 µS/cm at 25 °C, stand, beaker, short instruction manual, CD-ROM and batteries.	2CA201
Cond 3310 Set 1	Professional, field proven conductivity meter with backlit graphic display for mobile applications including data logger, USB-interface. Meter with carry case including 4-electrode conductivity cell TetraCon® 325, standard solution 1413 µS/cm at 25 °C, stand, beaker, short instruction manual, CD-ROM and batteries, driver software for USB, cable.	2CA301
pH/Cond 3320 Set 2	Professional pH/conductivity meter with 2 inputs (DIN, 8 pin socket), backlit graphic display, for mobile application with data logger and USB interface, meter in carry case including SenTix® 41, TetraCon® 325, buffer solution STP 4 and STP 7, conductivity standard 0.01 mol/l KCl. Instruction manual, stand, beaker, CD-ROM, driver software for USB, batteries, cable.	2EA312
Multi 3320 Set 1	Professional pH/dissolved oxygen/conductivity meter with 2 inputs (DIN, 8 pin socket), backlit graphic display, for mobile application with data logger and USB interface, meter in field case with SenTix® 41, CellOx® 325, TetraCon® 325, sensor accessories, instruction manual. stand, beaker, CD-ROM, driver software for USB, batteries, cable.	2FA311
pH/ION 3310	Professional pH/mV/ISE meter with DIN socket, backlit graphic display, for mobile application with data logger and USB interface. Single instrument including instruction manual, CD-ROM and batteries, cable.	2GA310
SM Pro	SM Pro Rubber elastic armor for WTW handhelds	902 780