ProfiLine Handhelds

For pH, ISE, Dissolved Oxygen and Conductivity

WTW

ProfiLine

Single Parameter Instruments

Data-logging   Mobile Lab   Measurements   Communication

Quality

Communication   Surface waters   Fishfarming

Ground Water

Wastewater   Measurements   Mobile Lab

pH   Cond   D.O.

3110 Series : Functional and easy-to-use

For people who want a reliable, simple and easy-to-use portable pH meter, the **pH 3110** 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

pH **Cond** **D.O.**
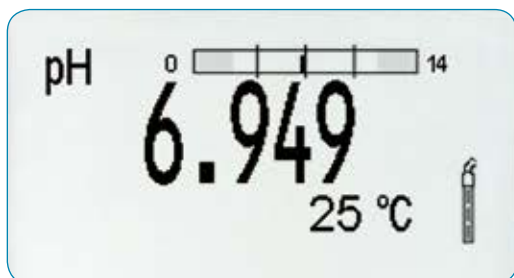
3210 Series: Convenient and versatile

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 **Oxi 3210** and the **Cond 3210** allow flexibility to connect different sensors for application specific measuring.

The **Oxi 3205** 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.

pH **ISE** **D.O.** **Cond**

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 **pH 3310**, **pH/ION 3310, Cond 3310** and **Oxi 3310** 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

Quality

Communication   Surface waters   Fishfarming

Ground Water

Wastewater   Measurements   Mobile Lab

pH   ISE   Cond

pH/Cond 3320: Perfect for Process Application

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

Water proof socket field

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

<div align="right">(all values ± 1 digit)</div>

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-re-chargeable battery	4 x 1.5 V AA oder 4 x 1.2 V NiMH-re-chargeable battery	4 x 1.5 V AA oder 4 x 1.2 V NiMH-re-chargeable 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 ± 0.1 pH −2.00…20.00 ± 0.01 pH −2.000…19.999 ± 0.005 pH	−2.0…20.0 ± 0.1 pH −2.00…20.00 ± 0.01 pH −2.000…19.999 ± 0.005 pH	−2.0…20.0 ± 0.1 pH −2.00…20.00 ± 0.01 pH −2.000…19.999 ± 0.005 pH
mV	± 1200.0 ± 0.3 mV ±(2000 ± 1) mV	± 1200.0 ± 0.3 mV ±(2500 ± 1) mV	± 1200.0 ± 0.3 mV ±(2500 ± 1) mV
ISE (mg/l, µmol/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 °C ± 0.1 °C	−5.0…105.0 °C ± 0.1 °C	−5.0…105.0 °C ± 0.1 °C
CMC	-	yes	yes
Calbration	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 ± 0.5 % of val. 0…90 mg/L ± 0.5 % of val.	0.00…20.00 mg/l ± 0.5 % of val. 0…90 mg/L ± 0.5 % of val.
Saturation*		0.0 …200.0 % ± 0.5 % of val. 0…600 % ± 0.5 of val.	0.0 …200.0 % ± 0.5 % of val. 0…600 % ± 0.5 of val.
Partial pressure*		0…200.0 hPa, 0…1250 hPa. ± 0.5 % of val.	0…200.0 hPa, 0…1250 hPa. ± 0.5 % of val.
Temperature		−5.0…50.0 °C ± 0.1 °C	−5.0…50.0 °C ± 0.1 °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 ± 0.5 % of val.	0.0…1000 mS/cm ± 0.5 % of val.	0.0…1000 mS/cm ± 0.5 % of val.
additionally		0.000…1.999 µS/cm. K = 0.01 cm⁻¹ 0.00…19.99 µS/cm. K = 0.1 cm⁻¹	0.000…1.999 µS/cm. K = 0.01 cm⁻¹ 0.00…19.99 µS/cm. K = 0.1 cm⁻¹
Specific resistance	-	0.00…20 MΩ cm	0.00…20 MΩ cm

Cell constants	fixed 0.475 cm⁻¹, 0.880 cm⁻¹.
	calibratable: 0.450…0.500 cm⁻¹.
	          0.800…0.880 cm⁻¹
		fixed: 0.010 cm⁻¹
		calibratable: 0.450…0.500 cm⁻¹.
		          0.800…0.880 cm⁻¹.
		adjustable: 0.090…0.110 cm⁻¹
		          0.250…25.000 cm⁻¹
			fixed: 0.010 cm⁻¹
			calibratable: 0.450…0.500 cm⁻¹.
			          0.800…0.880 cm⁻¹.
			adjustable: 0.090…0.110 cm⁻¹
			          0.250…25.000 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 °C ± 0.1 °C	−5.0…105.0 °C ± 0.1 °C	−5.0…105.0 °C ± 0.1 °C
T_{ref}	20 °C/25 °C	20 °C/25 °C	20 °C/25 °C
Temperature Compensation	nLF	none. nlF. 0.000…3.000 %/K	none. nlF. 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
(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 backlitgraphic 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

What can Xylem do for you?

We're 12,900 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com

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