

ProfiLine multi-parameter portable meters for analogue sensors

ProfiLine is a line of robust and watertight multi-parameter portable meters for analogue sensors. They measure simultaneously from a selection of different parameters with a maximum of 2 sensors.

**3 year
warranty**
IP 67


pH/ION 3310

A portable specialist for pH/mV/ISE measurement. You can find more information in the chapter "Ion-selective measurement".

see page 80



pH/ION 3310

pH

ORP

ISE

Dissolved Oxygen

Conductivity

BOD/Respiration

Photometry

Turbidity

Software,
Documentation

Technical specifications: Multi-parameter portable meters for analogue sensors

ProfiLine		pH/Cond 3320 and Multi 3320		
pH measurement	Measurement Range pH	-2.0 ... 20.0 ±0.1 pH -2.00 ... 20.00 ±0.01 pH -2.000 ... 19.999 ±0.005 pH		
	Measurement range mV	± 1200.0 mV ± 0.3 mV ± (2500 ± 1) mV		
	Measurement range ISE	Conc. (mg/l, µmol/l, mg/kg, ppm, %)	0.000 ... 9.999 10.00 ... 99.99 100.0 ... 999.9 1000 ... 999999	
	Measurement range temperature	-5.0 ... 105.0 °C ± 0.1 °C		
	CMC	Yes		
	Calibration	1-, 2-, 3-, 4-, 5-point calibration WTW Technical, DIN-, NIST- as well as further 22 buffer sets ISE 2 ... 7-point calibration, also non-linear		
	Conductivity measurement	Measurement range conductivity	0.00 ... 1000 mS/cm ± 0.5 % of measured value	
Measurement range specific resistance		1 Ohm/cm ... 199.9 MOhm/cm (dependent on cell constant)		
Cell constants		Fixed: Additionally With calibration: Adjustable:	0.01 cm ⁻¹ 0.000 ... 1.999 µS/cm, K= 0.01 cm ⁻¹ 0.00 ... 19.99 µS/cm, K= 0.1 cm ⁻¹ 0.450 to 0.500 cm ⁻¹ 0.800 ... 0.880 cm ⁻¹ 0.090 ... 0.110 cm ⁻¹ 0.250... 25.000 cm ⁻¹	
Salinity		0.0 ... 70.0 (as per IOT)		
TDS		1 ... 1999 mg/l, 0 to 199.9 g/l		
Measurement range temperature		-5.0 ... 105.0 °C ± 0.1 °C		
Sensor plug		8 pins		
Calibration (conductivity)		1-point	0.01 mol/l KCl 1413 µS/cm at 25°C	
T _{ref}		20 °C/25 °C		
Temperature compensation		None, nIF, 0.000 ... 10.000 %/K		
Additionally with Multi 3320:				
Oxygen measurement		Measurement range dissolved oxygen	Concentration*	0.00 ... 20.00 mg/l ± 0,5 % measured value 0 ... 90 mg/L ± 0,5 % of measured value
			Saturation *	0.0 ... 200.0 % ± 0,5 % of measured value 0 ... 600 % ± 0.5 of measured value
	Partial pressure*		0 ... 200.0 hPa, 0 ... 1250 hPa, each ± 0,5% of measured value	
	Measurement range temperature	0.0 ... 50.0 °C ± 0.1 °C		
Calibration	CellOx / DurOx with OxiCal calibration vessels, in addition against external standard			
Air pressure compensation	Through built-in sensor			
General data				
Calibration memory		Retrievable up to 10 calibrations		
AutoRead		Can be switched automatically/manually		
Display Celsius/Fahrenheit		Yes		
Display		LCD graphics -, backlit		
Data memory		500 manual, 5000 automatic		
Logger		Manual/time-controlled		
Waterproof		IP 67		
Interface		USB slave		
Power Supply		4 x 1.5 V AA or 4 x 1,2 V NiMH battery pack		
Permanent operation		Up to 800 h without or 100 h with illumination		

* depending on sensor

All values ± one position after decimal point

Multi 3320



ProfiLine Multi 3320

- **Extensive measurement functions for pH, ORP, ISE, conductivity and dissolved oxygen**
- **Built-in memory and data logger for recording measurement series**
- **Backlit graphic display with simultaneous display of the measurement values**

The Multi 3320 measures pH, ORP, ISE conductivity and dissolved oxygen (electrochemical). It is an ideal meter for environmental applications like groundwater and surface water measurement, aquaculture, as well as in a wastewater treatment plant and much more. Also suitable for process applications where dissolved oxygen is important. All analogue WTW pH/ORP electrodes, combined ISE electrodes, conductivity cells and galvanic dissolved oxygen sensors can be connected to the meter.

Clear measurements

- Backlit graphic display with CMC function for pH
- Measure two parameters simultaneously

GLP/AQA compliant documentation

- GLP-supporting data acquisition with date, time, ID number

Flexible and high performance:

- pH, ORP, ISE, conductivity and dissolved oxygen measurement
- Memory with 5,000 entries
- Data output on the PC

pH/Cond 3320



ProfiLine pH/Cond 3320

- **Two inputs for the simultaneous measurement of pH/mV/ISE and conductivity**
- **Backlit graphic display for the simultaneous display of the measured values**
- **Perfect for monitoring process applications**

The pH/Cond 3320 measures pH, ORP, ISE and conductivity. It is used almost everywhere – from process chemistry via life science, food and beverage to the pharmaceutical industry (measurement of pH and conductivity according to pharmacopoeia). It is a handy and robust meters, even for demanding applications which require documentation.

Reliable measurements

- Backlit graphic display with CMC function for pH
- Measure two parameters simultaneously

GLP/AQA compliant documentation

- GLP-supporting data acquisition with date, time, ID number

Flexible and high performance:

- pH, ORP, ISE and conductivity measurement
- Memory with 5,000 entries
- Data output on the PC

Order information: Multi-parameter portable meters for analogue sensors

Model	Description	Order no.
pH/Cond 3320 SET 2	Professional pH/conductivity meter with 2 inputs, meter in a carrying case with pH electrode SenTix® 41, conductivity cell TetraCon® 325 and accessories	2EA312
Multi 3320 SET 1	Professional pH/dissolved oxygen/conductivity meter with 2 inputs, meter in a field carrying case with pH - electrode SenTix® 41, dissolved oxygen sensor CellOx® 325, conductivity cell TetraCon® 325 and accessories	2FA311
Further sets see price list or www.WTW.com		