

# Water Quality Meters

## WTW MultiLine® 3400 Series IDS Meters

These new multi-parameter systems have IDS (Intelligent, Digital Sensors) sensors for pH, dissolved oxygen and conductivity measurement.

The signal processing is completely located in the sensor, and the measuring signal is transmitted to the meter without interference in a clearly identifiable manner via thin, high strength cables. A wide range of sensors are available for virtually every application.

There are 3 models; with one, two or three universal channels that measure every parameter either sequentially or simultaneously. Every model possesses a brilliant color graphic display, two USB interfaces (USB-A and Mini-USB), and rechargeable batteries that can be charged directly in the device.

### FEATURES

- Intelligent sensors store an ID
- Digital processing and data transfer of sensor measurement
- Brilliant high resolution TFT color display
- Simultaneous display of one, two or three parameters
- Optical support of important maintenance and measuring function
- Field proven housing with rubber boot (set), waterproof to IP-67
- Robust and waterproof keypad
- Error-free operation, even when wearing gloves
- Waterproof quick-lock sensor connection
- Datalogger for GLP compliant data
- Data transfer directly to USB stick or selected printers
- Mini USB data transfer to PC or for firmware update



Multi 3410 IDS

Multi 3420 IDS

Multi 3430 IDS

### MULTILINE 3400 SERIES MODELS

#### Multi 3410 IDS

Professional digital multi meter for portable field measurement, with single channel input, color graphic display including data logger and USB interfaces. Single instrument with short instruction manual, CD-ROM, rechargeable batteries, driver software for USB, cable and universal power supply.

- 1 Channel
- 3 Parameters
- High resolution color graphic display
- Safe data transmission to USB stick
- Turbidity measurement with the VisoTurb® 900-P

#### Multi 3420 IDS

Professional digital multi meter for portable field measurement, with dual channel input, color graphic display including data logger and USB interfaces. Single instrument with short instruction manual, CD-ROM, rechargeable batteries, driver software for USB, cable and universal power supply.

- 2 Channels
- 3 Parameters in any combination
- High resolution color graphic display
- Safe data transmission to USB stick
- Turbidity measurement with the VisoTurb® 900-P

#### Multi 3430 IDS

Professional digital multi meter for portable field measurement, with triple channel input, color graphic display including data logger and USB interfaces. Single instrument with short instruction manual, CD-ROM and rechargeable batteries, driver software for USB, cable, universal power supply, armoring SM Pro.

- 3 Channels
- 3 Parameters in any combination
- High resolution color graphic display
- Safe data transmission to USB stick
- Turbidity measurement with the VisoTurb® 900-P

**CALL GEOTECH TODAY (800) 833-7958**

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# Water Quality Meters



## WTW MultiLine® 3400 Series IDS Meters

### METER SPECIFICATIONS

#### General

<b>Memory</b>	Automatic, 10000 data sets
<b>Datalogger</b>	Manual/Time controlled
<b>Interface</b>	USB host and Mini-USB
<b>Power Supply</b>	Battery charger or 4 x 1.2 V NiMH Rechargeable
<b>Continuous</b>	100 h
<b>Protection Class</b>	P-67

#### pH Measurement

<b>pH</b>	-2.0 – 20.0 pH -2.00 – 20.00 pH -2.000 – 20.000 pH
<b>mV</b>	±2000, ±1250.0
<b>Temperature</b>	-5.0° – 105.0°C
<b>AutoRead</b>	Automatic/Manual
<b>CMC</b>	Yes
<b>QSC</b>	Yes
<b>Calibration</b>	1-, 2-, 3-, 4-, 5-point; WTW Technical, DIN/NIST, additionally 22 buffer sets
<b>Calibration Memory</b>	Up to 10 calibrations

#### Conductivity Measurement

<b>Conductivity</b>	0.0 – 2000 mS/cm
<b>Additionally</b>	0.00 – 19.99 µS/cm, K = 0.1 cm <sup>-1</sup>
<b>Spec. Resistivity</b>	0.00 – 20 MΩ cm
<b>Cell Constants</b>	Automatic
<b>Salinity</b>	0.0 – 70.0 (acc. IOT)
<b>TDS</b>	0 – 1999 mg/l, 0 – 199.9 g/l
<b>Temperature</b>	-5.0° – 105.0°C
<b>AutoRead</b>	Automatic/Manual
<b>Tref</b>	20°C/25°C
<b>Temp. Compensation</b>	Non, nIF, 0.000 – 10.000%/K
<b>Calibration Memory</b>	Up to 10 calibrations

#### D.O. Measurement (Optical)

<b>Concentration</b>	0.00 – 20.00 mg/l
<b>Saturation</b>	0.0 – 200.0%
<b>Partial Pressure</b>	0 – 400.0 hPa
<b>Temperature</b>	0.0° – 50.0°C
<b>AutoRead</b>	Automatic/Manual
<b>Calibration Memory</b>	Up to 10 calibrations
<b>Barometric Sensor</b>	Built-in

### SENSOR SPECIFICATIONS

#### IDS pH sensors

	SenTix® 940	SenTix® 940-3	Sensolyt® 900-P	SenTix® 950	SenTix® 980	Sensolyt® ORP 900-P
<b>Meas. Range pH</b>	0.000 – 14.000 ±0.004		2.000 – 12.000 ±0.004	0.000 – 14.000 0° – 100°C		mV: ±1200.0 ±0.2
<b>Temp. Range</b>	0° – 80°C	0° – 80°C	0° – 60°C	0° – 80°C	0° – 100°C	0° – 60°C
<b>Ref. Electrolyte</b>	Gel	Gel	Polymer	3 mol/l KCl	3 mol/l KCl	Polymer
<b>Membrane Type</b>	Cylindrical	Cylindrical	Cylindrical	Cylindrical	Cone	Cylindrical
<b>Junction</b>	Fiber	Fiber	Hole	Ceramic	Platinum Wire	Hole
<b>Shaft Material</b>	Plastic	Plastic	Glass	Plastic	Glass	Glass
<b>Shaft Dimensions</b>	Length 120 mm ±2 mm, Ø 12 mm ±0.5 mm					
<b>Temp. Accuracy</b>	±0.2°C					
<b>Cable Length</b>	1.5 m	3 m	Plug Head	1.5 m	1.5 m	Plug Head

#### IDS Conductivity Cells

	TetraCon® 925	TetraCon® 925-3	TetraCon® 925-P	LR 925/01
<b>Type</b>	4-Electrodes, Graphite			2-Electrodes, Stainless Steel
<b>Conductivity</b>	10 µS/cm – 2000 mS/cm ±0.5% of value			0.01 – 200 µS/cm ±0.5% o.v.
<b>Spec. Resistivity</b>	0.5 Ohm cm – 100 kOhm cm ±0.5% of value			5 kΩ – 100 MΩ ±0.5% o.v.
<b>Salinity</b>	0.0 – 70.0 ±0.5% of value			–
<b>TDS</b>	0 – 1999 mg/l, 0 – 199.9 g/l ±0.5% of value			–
<b>Temperature</b>	0 – 100.0°C ±0.2°C			
<b>Shaft Material</b>	Epoxy			Stainless Steel
<b>Shaft Dimensions</b>	Length 120 mm ±1 mm, Ø 15.3 mm ±0.2 mm			120 ±1 mm, Ø 12 ±0.2 mm
<b>Cable Length</b>	1.5 m	3 m	Plug Head	1.5 m

#### IDS D.O. Sensors

	FDO 925	FDO 925-3	FDO 925-P
<b>Concentration</b>	0.00–20.00 mg/l ±0.5% of value		
<b>Saturation</b>	0.0 – 200.0% ±0.5% of value		
<b>Partial Pressure</b>	0.0 – 400 hPa ±0.5% of value		
<b>Temperature</b>	0 – 50.0°C ±0.2°C		
<b>Membrane Type</b>	Bevelled		
<b>Shaft Material</b>	POM, Stainless Steel		
<b>Shaft Dimensions</b>	Length 140 mm ±1 mm, Ø 15.3 mm ±0.2 mm		
<b>Cable Length</b>	1.5 m	3 m	Plug Head

Given accuracy corresponds with accuracy of sensor electronics.

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## WTW MultiLine® 3400 Series IDS Meters

### ORDERING INFORMATION

Model	Description
Multi 3410	Professional digital multi meter for portable field measurement, with single channel input, color graphic display including data logger and USB interfaces. Single instrument with short instruction manual, CD-ROM, rechargeable batteries, driver software for USB, cable and universal power supply.
Multi 3410 SET 1	Professional digital multi meter for portable field measurement, with single channel input, color graphic display including data logger and USB interfaces. Case set with digital IDS pH electrode SenTix® 940, QSC Kit, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro.
Multi 3410 SET 4	Professional digital multi meter for portable field measurement, with single channel input, color graphic display including data logger and USB interfaces. D.O. case set with optical IDS D.O. probe FDO® 925, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro
Multi 3410 SET 7	Professional digital multi meter for portable field measurement, with single channel input, color graphic display including data logger and USB interfaces. Conductivity case set with digital IDS 4-electrode conductivity cell TetraCon® 925, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro.
Multi 3420	Professional digital multi meter for portable field measurement, with dual channel input, color graphic display including data logger and USB interfaces. Single instrument with short instruction manual, CD-ROM, rechargeable batteries, driver software for USB, cable and universal power supply.
Multi 3420 SET C	Professional digital multi meter for portable field measurement, with dual channel input, color graphic display including data logger and USB interfaces. Multi case set with IDS sensors: digital pH electrode SenTix® 940, digital conductivity 4-electrode cell TetraCon® 925, QSC Kit, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro.
Multi 3420 SET G	Professional digital multi meter for portable field measurement, with dual channel input, color graphic display including data logger and USB interfaces. Multi case set with IDS sensors: digital pH electrode SenTix® 940-3, digital conductivity cell TetraCon® 925-3, optical D.O. probe FDO® 925-3, QSC Kit, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro.
Multi 3430	Professional digital multi meter for portable field measurement, with triple channel input, color graphic display including data logger and USB interfaces. Single instrument with short instruction manual, CD-ROM and rechargeable batteries, driver software for USB, cable, universal power supply, armoring SM Pro.
Multi 3430 SET F	Professional digital multi meter for portable field measurement, with triple channel input, color graphic display including data logger and USB interfaces. Large multi case set with IDS sensors: digital pH electrodes SenTix® 940, digital conductivity cell TetraCon® 925, optical D.O. probe FDO® 925, QSC Kit, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro.
Multi 3430 SET G	Professional digital multi meter for portable field measurement, with triple channel input, color graphic display including data logger and USB interfaces. Large multi case set with IDS sensors: digital pH electrode SenTix® 940-3, digital conductivity cell TetraCon® 925-3, optical D.O. probe FDO® 925-3, QSC Kit, short instruction manual, stand, beaker, CD-ROM, driver software for USB, rechargeable batteries, cable, universal power supply, armoring SM Pro.



Set in a Field Case with Multi 3430 IDS meter and IDS pH, Cond, and DO sensors



Set in Small Carry Case with Multi 3410 IDS meter and IDS pH sensor



IDS pH Electrodes

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