

Data Logger & Flow Measurement

Data Logger WQL

The WQL product line consists of data loggers for water quality monitoring, and are ideal for measurements and data logging over long periods of time. The WQL Series meets all the requirements for continuous pH/ORP and conductivity measurement in ground and surface water, as well as in drinking and wastewater.

WTW data loggers excel in challenging applications, including difficult to access measuring points. Their robust design and durable electrodes guarantee stable measurements under tough conditions.

The WQL Series

- Reliable data logging
- Automatic measurement over long periods of time
- Up to 600,000 data sets
- Suitable for boreholes and pipes

Simple and easy to use

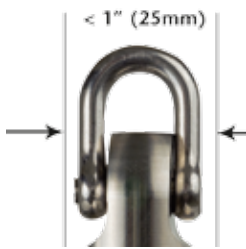
Data recording can be initiated or terminated manually via the Quick Start Button. Easy connection to PC with a mini USB connector cable. The status LED is used to monitor the operational state.



WQL-Cond cell

SensoLyt® WQL pH electrode



Optimized for boreholes


With a diameter of only 25 mm (1") the logger fits into very small pipes and boreholes. With the aid of the stainless steel shackle, which matches the diameter, the logger can be attached easily and safely.

Reliable data recording

All data loggers of the WQL series have a large flash memory for up to 600,000 records. This secure memory ensures reliable data storage to meet GLP requirements.

Long lifetime

A powerful 3.6 V lithium battery and power saving energy management guarantees a long service life. No additional accessories are needed to easily change the battery.

Well protected

The stainless steel finish provides optimum protection from all sides. The rugged WQL provides unmatched performance in field applications, even in the harshest conditions.

Convenient configuration and data analysis of the PC software WQL log

The operation and configuration are simple and easy, particularly suited for new, untrained users. Measurement results can be displayed as a table or graphics. Data can be exported into other software programs including Excel via the CSV format.


Sets

The convenient cases, with space for up to three data loggers and accessories, are suitable for field use.


Technical Data WQL Series

Model	WQL-pH/ORP			WQL-Cond	
Measuring range / resolution	pH	0.000 ... 20.000	SensoLyt® WQL	SensoLyt® WQL-PT	[µS/cm]
	mV	-1000.0 ... +1000.0	2.000 ... 12.000	—	0.0 ... 199.9
Temp. [°C]	Temp. [°C]	-5.0 ... +105.0	—	-2000.0 ... +2000.0	[mS/cm]
		(23.0 ... 221.0 °F)	0.0 ... +60.0	0.0 ... +60.0	20.0 ... 199.9
			(32.0 ... 140.0 °F)	(32.0 ... 140.0 °F)	200 ... 1000
					SAL
					0.0 ... 70.0
					TDS [g/l]
					0 ... 200
					Temp. [°C]
					-5.0 ... +105.0
					(23.0 ... 221.0 °F)
Accuracy (± digit)	pH	≤0.005			Conductivity
	mV	≤0.2			±0.5% of the measured value
	Temp.	≤0.1			Temp.
					±0.1
Calibration	AutoCal	1-/2-/3 point			—
	AutoCal-Tec	1-/2-/3 point			
	ConCal®	1-/2-/3 point			
Reference temperature	—				Selectable 20° C or 25° C (68/77 °F)
Cell constant	—				0.475/cm ±1.5%
Temperature compensation	—				Automatic/can be switched off
Temperature coefficient	—				None, linear, nonlinear (nLF) according to EN 27888 (default)

Ordering Information

WQL Series	Order No.
WQL-pH SET	4AA 591
WQL-Cond SET	4CA 591
WQL-pH/Cond SET	4AE 591



Flow Measurement

The flow rate is an important parameter in the determination of water flow levels in running water. WTW offers two robust and compact flow meters for measuring the flow rate of rivers, streams, canals and wastewater systems.

The CP Series

- For an easy and fast flow measurement
- Rugged and portable
- Proven system

The CP series is characterized by propellers, which are protected against damage from flotsam or contact with the bottom of a river bed. A small magnet mounted on the edge of the propeller provides a non-contact inductive counting pulse. This is directly converted into speed by an integrated microcomputer and displayed on the screen. If desired, up to 30 speed values can be stored and later displayed via the screen. The built-in battery has a service life of five years and will be replaced as needed by the manufacturer. The flow meter's telescoping rod allows the meters to be easily used from the shore, from bridges, and from piers. A convenient carrying case makes transport easy.



Technical Data CP Series

Model	CP-1	CP-2
Measuring range	0.1 m/s to 6.1 m/s	0.1 m/s to 6.1 m/s
Accuracy	0.03 m/s	0.03 m/s
Telescope length	0.9 – 1.8 m (2.95 – 5.91 ft.)	1.5 m – 4.5 m (4.92 – 14.76 ft.)

Ordering Information

CP Series		Order No.
CP-1	Flow meter with retractable telescopic handle, 0.9 to 1.8 m (2.95 ft. to 5.91 ft.)	509 000
CP-2	Flow meter with retractable telescopic handle, 1.5 to 4.5 m (4.92 ft. to 14.76 ft.)	509 001



1 Year
Warranty

The WLL Series for Level Measurements

The height of the ground water level above sea level is an indicator of the volume changes at the measuring point. Ground water levels are crucial in the planning and execution of construction work (building foundations, traffic areas, landfills), but also a critical factor when monitoring long-term changes and effects on the environment.

The WLL Series

- Long-term monitoring
- USB output
- Software included

The WLL Series automatically measures and stores water level changes using compensated air pressure measurements. The pressure is detected by the analog waterproof sensor and is sent to the splash-proof logger as mA signal. The logger, which is powered by standard batteries, stores over 80,000 measured values including time and date. Data can be transmitted to a PC or laptop via a USB port: the operating modes can also be programmed via this interface. In addition to interval-controlled measuring data acquisition, there is the logarithmic mode, and an event-driven mode. There are two versions, with differing measuring ranges and cable lengths.



Technical Data WLL Series

Sensor	WLL-1	WLL-2	Logger	
Level range	0 – 4.5 m (0 – 14.76 ft.)	0 – 9 m (0 – 29.53 ft.)	Power supply	2 x 9 V 6LR61 type
Accuracy	0.1% of the maximum value at a constant temperature 0.2 % between 0 °C and 21 °C (32 °F and 70 °F)		Operating temperature	-10 °C to 85 °C (14 °F to 185 °F)
Output	4 to 20 m A		Measurement intervals	Fixed intervals: 1 second to 1 year High speed: 10 Events/sec, logarithmic, event-controlled
Cable length	7.5 m (25 ft.)	15 m (50 ft.)	Memory / Interface	81759 entries including date / time USB B Interface
Dimensions	Length: 19 cm (11.42 in.) Diameter: 2.1 cm (0.83 in.)		Dimensions	Length: 29.2 cm (11.50 in.) Diameter: 4.8 cm (1.89 in.)

Ordering Information

WLL Series		Order No.
WLL-1	Level logger including sensor, 7.5 m (25 ft.) cable, software, batteries	509 010
WLL-2	Level logger including sensor, 15 m (50 ft.) cable, software, batteries	509 011



1 Year Warranty