SpH-L

XXXXXXXXX

SEPIA immersion sensors provide precise, modular and digital water analysis in any situation - in the laboratory, in the field, mobile and directly in the process of waterworks or sewage treatment plants. They offer maximum flexibility for water management, wastewater treatment, environmental laboratories, industrial processes and aquaculture and combine all measurement tasks in a single, modular, expandable system.

The SpH-L from the **SEPIA series** is a robust digital pH sensor with a flat pH membrane that is suitable for use in processes and laboratories. The sensor has a dirt-repellent polymer junction with a polymer gel electrolyte. The reference system of the pH electrode is separated from the measuring medium by an additional “double junction”. This reduces wear and potential poisoning of the reference electrode. The internal temperature compensation increases the accuracy of the measurements.

As an immersion sensor in the **SEPIA series**, the SpH-L was specially developed for use with the TriOS multiparameter probe **FALCON**. Digital communication ensures safety and interference-free signal transmission from the sensor to the controller.

The sensor SpH-L can also be connected to the Lab Controller **LoLA** with a SEPIA USB - this enables easy handling and intuitive operation, e.g. during calibration procedures.

The system portfolio is further supplemented by a SEPIA Modbus adapter, which transmits the measured values of individual sensors directly to any Modbus-compatible device or controller.

Advantages

- Digital, modern and ergonomic design
- Calibrate in the lab - use in the field
- High accuracy and reliability
- Cost-efficient due to modular design
- USB-C and Modbus for seamless integration
- Comparable results in the lab and in the field

Applications for

- Water suppliers
- Drinking water monitoring
- Sewage treatment plants
- Environmental laboratories
- Industrial applications
- Aquaculture

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Technical specifications

Measurement technology		pH electrode	
Measurement principle		potentiometry	
Parameters		pH value	
Measurement range		0 ... 14 pH	
Measuring accuracy		+/- pH 0.06	
Resolution		0.01 pH	
Repeatability		tbd	
Response time T90		< 20 s	
Temperature compensation		Yes	
Turbidity compensation		No	
Interface		digital, SEPIA	
Power supply		SEPIA	
Power consumption		< 120 mW	
Connection		3.5 mm jack plug, 4-pin (TRRS)	
Material	**Housing**	PET	
	Diaphragm	HDPE	
Dimensions (L x Ø)		~ 112 mm x 19 mm	~ 4.41 " x 0.74 "
Volume / filling volume		~ 27 mL	
Weight (with o-ring)		35 g	~ 0.08 lbs
Sample temperature		+0...+55 °C * +2...+40 °C (for specified measurement accuracy)	~ +32 to +131 °F * ~ +36 to +104 °F
Ambient temperature		+0...+55 °C * +2...+40 °C (for specified measuring accuracy)	~ +32 to +131 °F * ~ +36 to +104 °F
Storage temperature		-20...+60 °C	~ -4 to +140 °F

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Relative humidity	0...95 %, non-condensing	
Transportation conditions	see storage temperature and relative humidity	
Max. Max. pressure	3 bar	~ 43.5 psi
Inflow velocity	0...3 m/s	~ 0 to 10 fps
Degree of protection	IP68	
Operating altitude	max. altitude 2000 m	~ 6562 ft

* No ice crystals in the sample water

Maintenance effort	< 0.5 h / month typical
System compatibility	SEPIA compatible
Warranty	1 year (EU&US: 2 years) on electronics; wearing parts are excluded from the warranty

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