



## SpH-B

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### SEPIA digital pH sensor

The 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-B, a robust digital pH sensor from the SEPIA series, determines the pH value of samples in the laboratory or in the field. Its design, integrated temperature sensor and plug-and-play compatibility with the LoLA laboratory controller make it ideal for general laboratory applications or other pH measurements. The sensor features a cylindrical ceramic membrane and gel electrolyte in a standard 12 mm diameter version.

### Advantages

- Digital, modern and ergonomic design
- Calibrate in the laboratory - 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

- Water laboratories
- Environmental laboratories
- Sampling measurements in the field

## Technical specifications

### SpH-B

<b>Measuring technology</b>	pH electrode, cylindrical membrane	
<b>Measurement principle</b>	Potentiometry	
<b>Parameters</b>	pH value, temperature	
<b>Measurement range</b>	0...14 pH	
<b>Resolution</b>	0.01 pH	
<b>Measuring accuracy</b>	+/- pH 0.06	
<b>Response time</b>	T90 <10 s	
<b>Interface</b>	digital, SEPIA	
<b>Power supply</b>	SEPIA	
<b>Power consumption</b>	<120 mW	
<b>Connection</b>	3.5 mm jack plug, 4-pin (TRRS)	
<b>Housing material</b>	<b>Housing</b>	PET
	<b>Shaft</b>	PC
	<b>Diaphragm</b>	ceramic
<b>Dimensions (L x Ø)</b>	180 mm x 19 mm	~ 7.09" x 0.7"
<b>Volume / filling volume</b>	~ 28 mL	
<b>Weight</b>	~ 35 g (with o-ring)	~ 0.08 lbs
<b>Sample temperature</b>	+0...+55 °C * +2...+40 °C (for specified measurement accuracy)	~ +32 to +131 °F * ~ +36 to +104 °F
<b>Ambient temperature</b>	+0...+55 °C * +2...+40 °C (for specified measuring accuracy)	~ +32 to +131 °F * ~ +36 to +104 °F
<b>Storage temperature</b>	0...+50 °C	~ +32 to +122 °F
<b>Relative humidity</b>	0...95 %, non-condensing	

\* No ice crystals in the sample water

<b>Transportation conditions</b>	See storage temperature and relative humidity	
<b>Max. pressure</b>	30 bar	~ 435 psi
<b>Inflow velocity</b>	0...3 m/s	~ 0 to 10 fps
<b>Degree of protection</b>	IP68	
<b>Operating altitude</b>	max. altitude 2000 m	~ 6562 ft

\* No ice crystals in the sample water

<b>Maintenance effort</b>	< 0.5 h / month typical	
<b>Calibration / maintenance interval</b>	tbd	
<b>System compatibility</b>	SEPIA compatible	
<b>Warranty</b>	1 year (EU & USA 2 years) on electronics; wearing parts are excluded from the warranty	

\*TriOS recommendation: storage at +5...+15 °C (+41 to +59 °F) for a longer shelf life