

pH / Temperature

PHEHT



pH- / Temperature Monitoring

The pH probe with integrated temperature sensor was designed for use in challenging conditions. The possible applications range from pure spring water all the way to wastewater. The special Plastogel® technology increases service life and thereby reduces the need to replace the cartridge.

Thanks to the low energy consumption and quick response time, the pH sensor can be used in mobile and stationary applications.

The intelligent sensor saves data such as calibration directly in the sensor. This enables „play-and-play“ usage without requiring recalibration.

Transfer of data is accomplished by means of a Modbus protocol.

- **pH and temperature** measurement
- **Calibration data** stored directly in sensor
- For **mobile** and **stationary** applications
- **Data transfer** via Modbus RS485
- **pH measuring range:** 0 to 14
- **Temperature measuring range:** 0 °C to +50 °C

Technical Data

General

Dimensions	Diameter: 27 / 21 mm Length: 207 mm
Weight	350 g (sensor + 3 m cable)
Material	PVC, Delrin®, special pH glass, platinum polyamide
Operating Temp.	0 to +50 °C
Storage Temp.	0 to +60 °C
Communication	Modbus RS-485 (optional: SDI-12)
Connector	Specialized cable with Fisher connector or open ends
Power Requirement	5 to 12 V
Energy Consumption	Standby: 25 µA Average (1 measurement/s): 3.9 mA
Impulse Current	500 mA
Maximum Pressure	5 bar
Protection Class	IP 68

pH Measurement

Measuring Principle	Combined electrode (pH/reference), special glass, Ag/AgCl Ref. electrolyte (KCl)
Measuring Range	0 - 14 pH
Resolution	0.01 pH
Accuracy	± 0.1 pH

Temperature Measurement

Technology	NTC
Measuring Range	0 to +50 °C
Resolution	0.01 °C
Accuracy	± 0.5 °C
Response Time	< 5 s