

# Digital pH sensor Memosens CPS61E

Memosens 2.0 glass sensor for the food & beverage industry and for bioreactors in biotech industry



More information and current pricing:

[www.endress.com/CPS61E](http://www.endress.com/CPS61E)

## Benefits:

- Memosens 2.0 offers extended storage of calibration and process data, enabling better trend identification and providing a future-proof basis for predictive maintenance and enhanced IIoT services.
- The sensor's exceptional accuracy and reproducibility help you to keep the pH value in the optimum range for a maximized product yield.
- A special glass membrane and reference system makes the sensor CIP/SIP and autoclaving resistant (up to 140°C/284°F) offering maximum long-term stability.
- The sensor protects your product quality with its certified biocompatibility according to USP class VI, FDA compliance of wetted parts, VO 1935/2004 compliance, no cytotoxicity, bioreactivity or animal-based materials.
- Streamline maintenance of CPS61E with the Memobase Plus software that automatically stores and documents all relevant sensor and process data.
- Maximum process safety through non-contact, inductive signal transmission
- Reduced operating costs thanks to minimized process downtime and extended sensor lifetime.

## Specs at a glance

- **Measurement range** pH: 0 to 14
- **Process temperature** Application N: 0 to 100 °C (32 to 212 °F) Up to 140 °C (284 °F) for sterilization
- **Process pressure** 0.8 to 7 bar (11.6 to 101.5 psi) absolute

**Field of application:** Keep the pH value in the optimum range and maximize your product yield with Memosens CPS61E. Its rugged design and long-term stability ensure extremely accurate and reproducible measured values even after CIP/SIP or autoclaving. CPS61E features Memosens 2.0 digital technology, offering extended storage of calibration and process data for predictive maintenance. The sensor resists moisture and enables lab calibration, enhancing process integrity and increasing process uptime.

## Features and specifications

pH

### Measuring principle

Potentiometric

### Application

Hygienic and sterile applications (sterilizable, autoclavable):

- Bioreactor/fermenter
- Biotechnology
- Pharmaceutical industry
- Foods

### Characteristic

Digital pH electrodes for hygienic production processes with ion trap for long-term stable reference

### Measurement range

pH: 0 to 14

### Measuring principle

Gel compact electrode with ceramic junction and ion trap

### Design

All shaft lengths with temperature sensor

Advanced gel technology

pH

**Material**

Sensor shaft: Glass to suit process  
pH membrane glass: Type N  
Metal lead: Ag/AgCl  
Open aperture: Ceramic junction, zirconium dioxide  
O-ring: FKM  
Process coupling: PPS fiber-glass reinforced  
Nameplate: Ceramic metal oxide

**Dimension**

Diameter: 12 mm (0.47 inch)  
Shaft lengths: 120, 225, 360 and 425 mm  
(4.72, 8.86, 14.2 and 16.7 inch)

**Process temperature**

Application N:  
0 to 100 °C (32 to 212 °F)  
Up to 140 °C (284 °F) for sterilization

**Process pressure**

0.8 to 7 bar (11.6 to 101.5 psi) absolute

**Temperature sensor**

NTC 30k

**Ex certification**

With ATEX, IECEx, CSA C/US, NEPSI, Japan Ex and INMETRO approvals for use in hazardous areas Zone 0, Zone 1 and Zone 2.

**Connection**

Inductive, contactless connection head with Memosens 2.0 technology

**Ingres protection**

IP68

More information [www.endress.com/CPS61E](http://www.endress.com/CPS61E)