

Digital ORP sensor Memosens CPS72E

Memosens 2.0 ORP electrode for chemical processes and poisoning media



More information and current pricing:

www.ch.endress.com/CPS72E

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 resists strong acids and bases and high organic loads.
- Its unique ion trap prevents poisoning of the junction and reference, ensuring a long sensor lifetime.
- Non-contact, inductive signal transmission maximizes process safety.
- Reduced process downtime and extended sensor lifetime minimize operating costs.

Specs at a glance

- **Measurement range** -1 500 to 1 500 mV
- **Process temperature** 0 to 140 °C (32 to 284 °F)
- **Process pressure** 0.8 to 14 bar (11.6 to 203 psi) (absolute)

Field of application: Memosens CPS72E is the digital specialist for demanding processes. Its unique, contamination-resistant reference guarantees stable measurement in poisoning media but also in media with low conductivity. Thanks to Memosens 2.0 digital technology, CPS72E combines maximum process integrity with simple operation. It resists moisture, enables lab calibration and offers extended storage of calibration and process data providing the perfect basis for predictive maintenance and IIoT services.

Features and specifications

ORP / Redox

Measuring principle

Sensor ORP / Redox

Application

Process technology and monitoring of processes with:

- Rapidly changing ORP values
 - High proportion of electrode poisons, such as H₂S
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Characteristic

Digital ORP electrode for chemical process with an ion trap for poison-resistant reference

Measurement range

-1 500 to 1 500 mV

Measuring principle

Gel compact electrode with ceramic junction

Design

All shaft lengths with temperature sensor
Advanced gel technology

Material

Sensor shaft: Glass to suit process
ORP measuring element: Platinum
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

0 to 140 °C (32 to 284 °F)

ORP / Redox

Process pressure

0.8 to 14 bar (11.6 to 203 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

Additional certifications

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