

# Digital ORP sensor Memosens CPS72E

## Memosens 2.0 ORP electrode for chemical processes and poisoning media



More information and current pricing:

[www.at.endress.com/CPS72E](http://www.at.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

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**Application**

Process technology and monitoring of processes with:

- Rapidly changing ORP values
  - High proportion of electrode poisons, such as H<sub>2</sub>S
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**Characteristic**

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

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**Measurement range**

-1 500 to 1 500 mV

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**Measuring principle**

Gel compact electrode with ceramic junction

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**Design**

All shaft lengths with temperature sensor

Advanced gel technology

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## ORP / Redox

**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

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**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)

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**Process temperature**

0 to 140 °C (32 to 284 °F)

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**Process pressure**

0.8 to 14 bar (11.6 to 203 psi) (absolute)

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**Temperature sensor**

NTC 30k

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**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.

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**Connection**

Inductive, contactless connection head with Memosens 2.0 technology

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ORP / Redox

**Ingres protection**

IP68

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**Additional certifications**

Additional certifications

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