

# Digital ammonium and nitrate sensor ISEmax CAS40D

## Ion-selective Memosens sensor for the wastewater industry



More information and current pricing:

[www.th.endress.com/CAS40D](http://www.th.endress.com/CAS40D)

### Benefits:

- Nitrate and ammonium measured directly without the need for expensive sample conditioning
- Optional potassium and/or chloride measurement compensates for cross sensitivities and ensures reliable measuring results
- Low maintenance thanks to automatic flushing unit
- Installed directly on the basin rim, no measuring container or sample-conveying pump required
- Easy handling due to storage of sensor-specific data

### Specs at a glance

- **Measurement range** Ammonium: 0.1 to 1000 mg/l (NH<sub>4</sub>-N)  
Nitrate: 0.1 to 1000 mg/l (NO<sub>3</sub>-N) Potassium: 1 to 1000 mg/l  
Chloride: 1 to 1000 mg/l
- **Process temperature** 2 °C to 40°C (36 to 100 °F)
- **Process pressure** 400 mbar (160 in H<sub>2</sub>O) max. permitted overpressure

**Field of application:** ISEmax CAS40D is the right technology for trend measurement directly in the basin. It helps you to increase the efficiency and reduce the energy costs of your aeration processes. The sensor works without reagents saving you even further money. With its robust ion-selective membranes and excellent self-cleaning, it eases your maintenance tasks. Thanks to Memosens, CAS40D combines maximum process and data integrity with best operating comfort and simplifies predictive maintenance.

### Features and specifications

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## Analyser

### Measuring principle

Potentiometric / ISE

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### Characteristic

Online measurement of nutrient parameters in municipal wastewater treatment plants

Ion-selective electrode system for the continuous measurement of ammonium and nitrate

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### Size

Diameter: 112 mm (4.41 inch)

Immersion depth: 510mm (20.08 inch)

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### Design

Ion-selective electrode(s) for ammonium and/or nitrate, potassium or chloride

pH - (Reference) electrode

Ion-selective electrode for compensating cross-interference

Temperature sensor

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### Process temperature

2 °C to 40°C (36 to 100 °F)

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### Ambient temperature

-20 °C to 50 °C (-4 to 120 °F)

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### Process pressure

400 mbar (160 in H<sub>2</sub>O) max. permitted overpressure

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### Application

Wastewater treatment plants

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**Analyser****Measurement range**

Ammonium:

0.1 to 1000 mg/l (NH<sub>4</sub>-N)

Nitrate:

0.1 to 1000 mg/l (NO<sub>3</sub>-N)

Potassium:

1 to 1000 mg/l

Chloride:

1 to 1000 mg/l

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