

# Aluminum analyzer

## Liquiline System CA80AL

Colorimetric system for drinking water and wastewater monitoring and optimization of process control



More information and current pricing:  
[www.ch.endress.com/CA80AL](http://www.ch.endress.com/CA80AL)

### Benefits:

- The aluminum analyzer uses the pyrocatechol violet method according to DIN ISO 10566, ensuring direct comparability to lab results
- Supports predictive maintenance by advanced diagnostics
- Reduces operating costs thanks to automatic calibration and cleaning as well as low reagent consumption
- Easy upgrade of functionality to a complete measuring station - by adding modules and connecting Memosens sensors.
- Comfortable remote access via integrated web server
- Seamless integration into process control systems thanks to digital field buses such as Modbus, PROFIBUS, EtherNet/IP

### Specs at a glance

- **Measurement range** 15 to 1000 µg/l Al 15 to 1000 µg/l with dilution function to maximum 300 to 20 000 µg/l Al
- **Process temperature** 4 ... 40 °C (39.2 ... 104 °F)
- **Process pressure** at atmospheric pressure, < 0.2 bar

**Field of application:** Liquiline System CA80AL offers precise, regulation-compliant online measurement of aluminum residues in drinking water and wastewater. The analyzer helps you to optimize aluminum dosing in flocculation processes and phosphate removal. It enables plug & play of up to 4 Memosens sensors – minimizing the installation effort. Automatic calibration and cleaning and the low reagent consumption reduce operating costs while advanced diagnostics with remote access ensure process safety.

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## Features and specifications

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### Analyser

**Measuring principle**

Colorimetric

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**Characteristic**

Process analyzer for aluminum in aqueous solutions

Comply with standard colorimetric measuring principle - pyrocatechol violet methot

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**Size**

Housing (open version):

793 x 530 x 417 mm

31.22 x 20.87 x 16.42 in

Housing (closed version):

793 x 530 x 463 mm

31.22 x 20.87 x 18.23 in

Housing with base:

1723 x 530 x 463 mm

67.83 x 20.87 x 18.23 in

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**Design**

Open design, cabinet and stand housing

High-Performance plastic ASA-PC, additional stand coated steel

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**Process temperature**

4 ... 40 °C (39.2 ... 104 °F)

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**Ambient temperature**

5 ... 40C ( 41 ... 104F)

Outdoor version: - 20 to 40 °C (-4 to 104 °F)

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**Process pressure**

at atmospheric pressure, < 0.2 bar

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**Sample flow rate**

min. 5ml/min (0,17 fl.oz/min)

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## Analyser

### Consistency of the sample

low solid content (< 50NTU), aqueous homogeneous

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### Application

Monitoring of the aluminum content of potable water, mineral water and industrial waste water

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### Power supply

100 ... 120 VAC / 200 ... 240 VAC  $\pm$  10%

24 VDC  $\pm$  10%

50  $\pm$  1 oder 60  $\pm$  1,2 Hz

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### Output / communication

2x 0/4 ... 20 mA

Webserver, Modbus, Ethernet/IP, Profibus DP

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### Input

1 or 2 measuring channel

1 ... 4 digital sensor inputs for sensors with Memosens protocol (optional)

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### Measurement range

15 to 1000  $\mu$ g/l Al

15 to 1000  $\mu$ g/l with dilution function to maximum 300 to 20 000  $\mu$ g/l Al

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### Consumables

Reagents and standard solutions CY80AL as well as cleaner CY800 are necessary for the operation. Regular maintenance is done with the parts of the maintenance kit CAV800.

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