

# Ammonium analyzer

## Liquiline System CA80AM

Colorimetric system for online monitoring of water and wastewater treatment



More information and current pricing:

[www.pt.endress.com/CA80AM](http://www.pt.endress.com/CA80AM)

### Benefits:

- Fast commissioning and plug & play thanks to Memosens technology and user-friendly operation
- Easy upgrade of functionality - even to a complete measuring station - simply by adding modules and connecting Memosens sensors
- Advanced diagnostics with remote access for increased process safety
- Reduced operating costs through automatic, configurable calibration and cleaning and long reagent shelf life with optional cooling module
- Compliance with standard colorimetric measuring principle - indophenol blue method - following ISO 7150-1, DIN 38406-5 and GB 7481-87

### Specs at a glance

- **Measurement range** 0.05 to 20 mg/l NH<sub>4</sub>-N 0.5 to 50 mg/l NH<sub>4</sub>-N 1 to 100 mg/l NH<sub>4</sub>-N 0.5 to 50 mg/l with dilution function to maximum 10 to 1000 mg/l NH<sub>4</sub>-N
- **Process temperature** 4 to 40 °C (39 to 104 °F)
- **Process pressure** Unpressurized
- **Measuring method** Comply with standard colorimetric measuring principle - indophenol blue method following ISO 7150-1, DIN 38406-5 and GB 7481-87

**Field of application:** Liquiline System CA80AM offers high-precision ammonium measurement in all critical control points. As member of the Liquiline platform, it enables plug & play and easy upgrade to a measuring station - minimizing the installation effort. Automatic calibration and cleaning as well as the low consumption of reagents save you operating and maintenance costs. Advanced diagnostics with remote

access ensure process safety and support you in providing process documentation to the authorities.

## Features and specifications

### Analyser

**Measuring principle**

Colorimetric

**Characteristic**

Analyzer for ammonium in aqueous solutions

**Measuring method**

Comply with standard colorimetric measuring principle - indophenol blue method following ISO 7150-1, DIN 38406-5 and GB 7481-87

**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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**Analyser****Design**

Open design / cabinet:  
Plastic ASA-PC  
Stand housing:  
Plastic ASA-PC, steel coated

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**Process temperature**

4 to 40 °C (39 to 104 °F)

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**Ambient temperature**

5 to 40 °C (41 to 104 °F)

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

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**Process pressure**

Unpressurized

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**Sample flow rate**

Min. 5 ml/min (0.17 fl.oz/min)

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**Consistency of the sample**

Low solids content  
Turbidity < 50 NTU, aqueous, homogenized

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**Specials**

Easy upgrade to measuring station with up to four digital Memosens sensors  
Automatic calibration and cleaning  
User-configurable measuring, cleaning and calibration intervals  
Optional cooling module for longer reagent life time  
Automatic calibration and cleaning  
Optional 2 channel version  
User-definable measuring ranges  
Flexible functionality and modular expandable  
Digital communication for remote access

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## Analyser

### Application

Monitoring and optimization of the cleaning capacity of municipal and industrial wastewater treatment plants  
Monitoring of the wastewater treatment plant outlet for documentation purposes  
Monitoring and optimization of activated sludge basins

### Power supply

100 to 120 VAC / 200 to 240 VAC  $\pm$  10%  
24 VDC  $\pm$  10%  
50  $\pm$  1 or 60  $\pm$  1.2 Hz

### Output / communication

2x 0/4 to 20 mA  
Optional: Webserver, Modbus, Ethernet/IP, Profibus DP

### Input

1 or 2 measuring channels  
Optional 1 to 4 digital sensor inputs for sensors with Memosens protocol

### Measurement range

0.05 to 20 mg/l NH<sub>4</sub>-N  
0.5 to 50 mg/l NH<sub>4</sub>-N  
1 to 100 mg/l NH<sub>4</sub>-N

0.5 to 50 mg/l with dilution function to maximum 10 to 1000 mg/l NH<sub>4</sub>-N

### Consumables

Reagents and standard solutions CY80AM  
Cleaner CY800  
Maintenance kit CAV800

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