

Spectrometer Memosens Wave CAS80E

UV-VIS spectrometer for the water & wastewater industry



Benefits:

- Ensures uninterrupted measurements in real time by operating directly in the process.
- Benefit from reliable, interference-free communication thanks to Memosens digital technology.
- Offers you the analysis of many standard parameters for your water and wastewater monitoring. Measures your specific selection of the parameters turbidity, suspended solids, CODeq, BODeq, TOCeq, SAC₂₅₄, nitrate and the APHA-Hazen color.
- The spectrometer is quickly adapted to your specific application through pre-installed analysis models.
- Compact, lightweight spectrometer that is very easy to install and convinces with its low-maintenance operation.

More information and current pricing:

www.apsc.endress.com/CAS80E

Specs at a glance

- **Measurement range** Depending on the path length and the application the measuring range vary: TOCeq: 0 to 400 mg/l CODeq: 0 to 20 000 mg/l BODeq: 0 to 5000 mg/l SAC₂₅₄: 0 to 1000 /m TU: 0 to 800 FAU TSS: 0 to 10 000 mg/l NO₃-N: 0 to 500 mg/l APHA/Hazen: 0 to 500 Hazen
- **Process temperature** 0 to 50°C 32 to 122 °F
- **Process pressure** 0.5 to 10 bar abs. 7.3 to 145 psi
- **Measuring method** UV/VIS Absorbance at 200 to 800 nm

Field of application: Memosens Wave CAS80E offers reliable real-time measurements of relevant analytical parameters such as chemical and biological oxygen demand (COD, BOD), turbidity, nitrate and spectral absorption coefficient (SAC) in one single device. It thus increases your efficiency and minimizes costs for your measuring points. The compact, handy Memosens Wave CAS80E spectrometer is easy to install and

maintain and ensures reliable, interference-free communication thanks to Memosens digital technology.

Features and specifications

Turbidity

Measuring principle

Absorption

Application

Monitoring of WWTP in- and outlet
Drinking water and surface water

Installation

Insitu (immersion in process), extractive with sample and flow cell

Characteristic

Insitu (immersion in process), extractive with sample and flow cell
UV/VIS spectrometer for measurement of TOCeq, CODEq, BODEq, SAC254, TU/TSS, Nitrate, APHA/Hazen color

Measurement range

"Depending on the path length and the application the measuring range vary:

TOCeq: 0 to 400 mg/l

CODEq: 0 to 20 000 mg/l

BODEq: 0 to 5000 mg/l

SAC254: 0 to 1000 /m

TU: 0 to 800 FAU

TSS: 0 to 10 000 mg/l

NO₃-N: 0 to 500 mg/l

APHA/Hazen: 0 to 500 Hazen

Measuring principle

UV/VIS absorbance at 200 to 800 nm

Design

40 mm

Turbidity**Material**

Housing: stainless steel or titanium

Windows: sapphire or quartz

O-rings: EPDM

Dimension

571.4 x 40 mm

21.5 x 1.6 in

Process temperature

0 to 50°C

32 to 122 °F

Process pressure

0.5 to 10 bar abs.

7.3 to 145 psi

Temperature sensor

-20 to 60°C

-4 to 140 °F

Connection

G1 and NPT 3/4"

Ingres protection

IP68

Concentration**Measuring principle**

UV absorbance

Application

Monitoring of WWTP in- and outlet, drinking water and surface water

Concentration

Characteristic

In situ (immersion in process)
Extractive with sample and flow cell UV/VIS spectrometer for measurement of TOCeq, CODEq, BODEq, SAC254, TU/TSS, Nitrate, APHA/Hazen color

Measurement range

Depending on the path length and the application the measuring range vary:

TOCeq: 0 to 400 mg/l

CODEq: 0 to 20 000 mg/l

BODEq: 0 to 5000 mg/l

SAC254: 0 to 1000 /m

TU: 0 to 800 FAU

TSS: 0 to 10 000 mg/l

NO₃-N: 0 to 500 mg/l

APHA/Hazen: 0 to 500 Hazen

Design

40 mm

Material

Housing: stainless steel or titanium

Windows: sapphire or quartz

O-rings: EPDM

Process temperature

0 to 50°C

32 to 122 °F

Process pressure

0.5 to 10 bar abs.

7.3 to 145 psi

Temperature sensor

-20 to 60°C

-4 to 140 °F

Concentration**Connection**

G1 and NPT 3/4"

Ingres protectionIP68

Analyser**Measuring principle**UV absorbance

Characteristic

Insitu (immersion in process), extractive with sample and flow cell UV/VIS spectrometer for measurement of TOCeq, CODEq, BODEq, SAC254, TU/TSS, Nitrate, APHA/Hazen color

Measuring methodUV/VIS Absorbance at 200 to 800 nm

Size

571.4 x 40 mm

21.5 x 1.6 in

Design40 mm

Process temperature

0 to 50°C

32 to 122 °F

Ambient temperature

-20 to 60°C

-4 to 140 °F

Process pressure

0.5 to 10 bar abs.

7.3 to 145 psi

Analyser

Specials

G1, NPT3/4 IP68 (1m/3,3ft) water column with 1N KCl during 60 days

Application

Monitoring of WWTP in- and outlet

Drinking water and surface water

Measurement range

Depending on the path length and the application the measuring range vary:

TOCeq: 0 to 400 mg/l

CODeq: 0 to 20 000 mg/l

BODeq: 0 to 5000 mg/l

SAC254: 0 to 1000 /m

TU: 0 to 800 FAU

TSS: 0 to 10 000 mg/l

NO₃-N: 0 to 500 mg/l

APHA/Hazen: 0 to 500 Hazen

More information www.apsc.endress.com/CAS80E