



# ColorPlus 3 SAK254

On-line DOC monitoring in water treatment



## **Properties**

- On-line measurement of DOC (UV absorption) with colour (Hazen) option
- Integrated compensation of window fouling with cleaning request
- Flow cell easy to clean without tools
- Elimination of turbidity influence by filters in the sample line
- Automatic instrument verification

## **Applications**

- Measurement of dissolved organic compands (DOC)
- SAK / SSK 254 (UV absorption) measurement
- Colour (Hazen) measurement

# **Industries**

- Treatment of drinking water
- Treatment of process water in various industries











# Innovations with tangible benefits

#### Multiple device configurations

The instrument is equipped with different optical filters, depending on the application:

- Filter for DOC (UV absorption) measurement
- 2 filters for automatic instrument verification
- 2 optional filter can be installed (turbidity compensation, color measurement)

#### The measuring cell

- The PVC cover can be opened without any tools
- Cover removal allows free access for cleaning

# Window fouling

The window fouling is determined with the use of two different optical path lengths. The influence is calculated:

- The measured values are automatically corrected
- The instrument informs the user when the fouling compensation is out of range and the cell needs to be cleaned

#### Wall mounting-set

Device to fit all components of the system (Instrument, SICON, filtration unit, measuring cell drainage, flow meter & pressure valve):

- Compact measuring station
- Simple & fast installation and commissioning

#### Intelligent control system

The SICON control unit with state-of-the-art touch screen technology and colour display:

- Values, graphs, alarm and status messages can be presented
- An internal data logger allows recalling and displaying measured data of the last 32 days

# Main technical details

Measuring principle: Absorption Wavelengths: 254 nm Measuring span: 0 .. 3 E

UV absoprtion: 100 mm 0 .. 30 E/m, 50 mm 0 .. 60 E/m

Resolution: 0.001 E

Units: E, E/m, Hazen, GOST, mg/l

Sample temperature: 0 .. 50 °C
Sample flow: 0.5 .. 1 l/min
Protection degree: IP 66







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**Device** 

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Resolution: 0.001 E

Measurig ranges: 8, freely configurable
Units: E, E/m, Hazen, GOST, mg/l

Ambient temperature: -20 °C .. +50 °C
Enclosure material: Stainless steel 1.4301

Protection degree: IP 67 Weight: 3.4 kg

Measuring cell

Material: PVC housing, stainless steel

1.4435

Path lengths Nitrate: 5/1.5 mm

Path lengths UV absorption: 50/10 mm, 100/10 mm

Window material:

Seals:

EPDM

Sample temperature:

0 .. 50 °C

Sample pressure:

600 kPA (6 bar)

Sample flow:

0.5 .. 1 l/min

Connections: Push fit 8 mm / G ¼" thread

Control unit SICON

Power supply: 24 VDC +/- 10%
Power consumption: 8 W, including sensor

Display: ¼ VGA, 3.5"

Operation: Touchscreen

Ambient temperature: -20 °C .. +50 °C

Ambient humidity: 0 .. 100% RH

Protection degree: IP 66

Outputs: 4 x 0/4 .. 20 mA galv.

separated

7 x digital, freely configurable Inputs: 5 x digital, freely configurable Digital interfaces: Ethernet, micro-SD card,

Modbus TCP

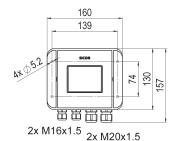
Optional modules (max. 2): Profibus DP, Modbus RTU,

Profinet IO,

4 x 0/4 .. 20mA outputs,

galv. separated

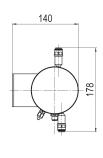
4 x 0/4 .. 20 mA inputs





sample outlet

plastic Push-in connections Ø8



**€** K



