

Complete monitoring system for continuous measurement of UV absorption at 254 nm for organic carbon trending in potable water and waste water effluent.

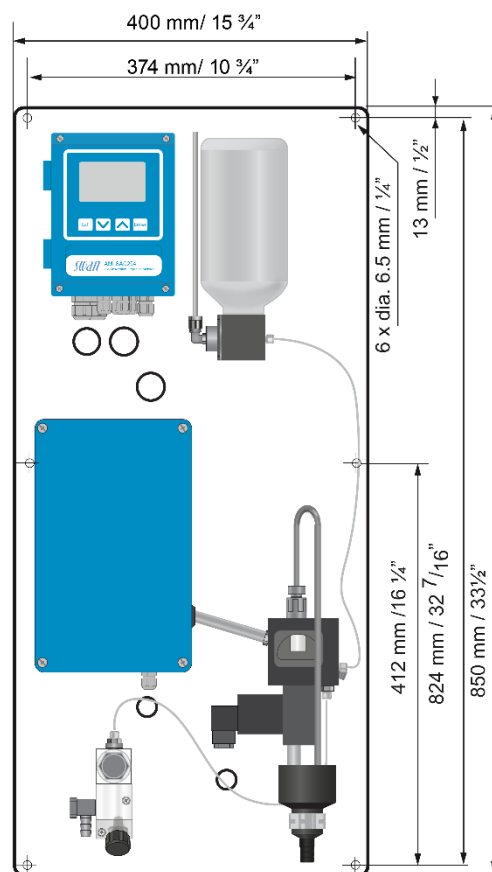
Monitor AMI SAC254

- Continuous UV absorption measurement with the possibility to monitor the organic load of the sample.
- Measuring range: 0 to 300 /m UVA
0 to 100 % UVT
- Correlation of the absorption to organic carbon related parameters (DOC, TOC, BOD, etc.) via one-point or two-point calibration or manual configuration of the correlation parameters.

Features:

- Insensitive to fouling of the optical components due to dynamic measurement at multiple path lengths.
- Turbidity correction at 550 nm according to DIN EN 38404-3.
- Certified standard solution available for instrument verification.
- Integrated flow monitoring for validation of measurement.
- Grab sample functionality for manual measurement, verification and calibration.

- Complete system mounted on PVC panel including measurement and control electronics, photometer and grab sample bottle. Optional flow controller with inlet strainer.
- Big backlit LC display for the reading of measuring value, sample flow and operating status.
- Easy user menus with simple programming of all parameters by keypad.
- Two current outputs (0/4 - 20 mA) for measured signals (3rd output optional).
- Factory tested, ready for installation and operation.



AMI SAC254 with Flow Controller

Option:

- Communication interface
- Flow Controller

Accessories:

- Chemical cleaning module

Order Nr.	Monitor AMI SAC254	A-25.451.000
Option:	<input type="checkbox"/> 3 rd current signal output (0/4 – 20mA)	A-81.420.050
	<input type="checkbox"/> Profibus DP & Modbus RTU interface (RS-485)	A-81.420.020
	<input type="checkbox"/> USB interface	A-81.420.042
	<input type="checkbox"/> HART interface	A-81.420.060
Option:	<input type="checkbox"/> Flow Controller	A-82.521.210

SAC254 Measurement

UV absorption measurement at multiple path length with correlation to DOC, TOC, BOD, etc. possible.

Measuring range: 0 to 300 /m
0 to 100 % UVT absorbance, UVT, concentration
Parameter: absorbance, UVT, concentration
Wavelength: 254 nm
550 nm (for turbidity correction)
Dimension: /m, /cm
Measuring interval: 30 sec. to 3 min.
Precision: ± (1% + 0.01 /m)
Limit of detection: 0.05 /m

Transmitter Specifications and Functionality

Electronics case: Cast aluminum
Protection degree: IP 66 / NEMA 4X
Display: backlit LCD, 75 x 45 mm
Electrical connectors: screw clamps
Dimensions: 180 x 140 x 70 mm
Weight: 1.5 kg
Ambient temperature: -10 to +50 °C
Humidity: 10 - 90% rel., non condensing

Power supply

Voltage: 100 - 240 VAC (± 10 %),
50/60 Hz (± 5 %)
or 24 VDC (± 10 %)
Power consumption: max. 30 VA

Operation

Easy operation based on separate menus for "Messages", "Diagnostics", "Maintenance", "Operation" and "Installation".
User menus in English, German, French and Spanish.
Separate menu specific password protection.
Display of process value, sample flow, alarm status and time during operation.
Storage of event log, alarm log and calibration history.
Storage of the last 1'500 data records in logger with selectable time interval.

Safety features

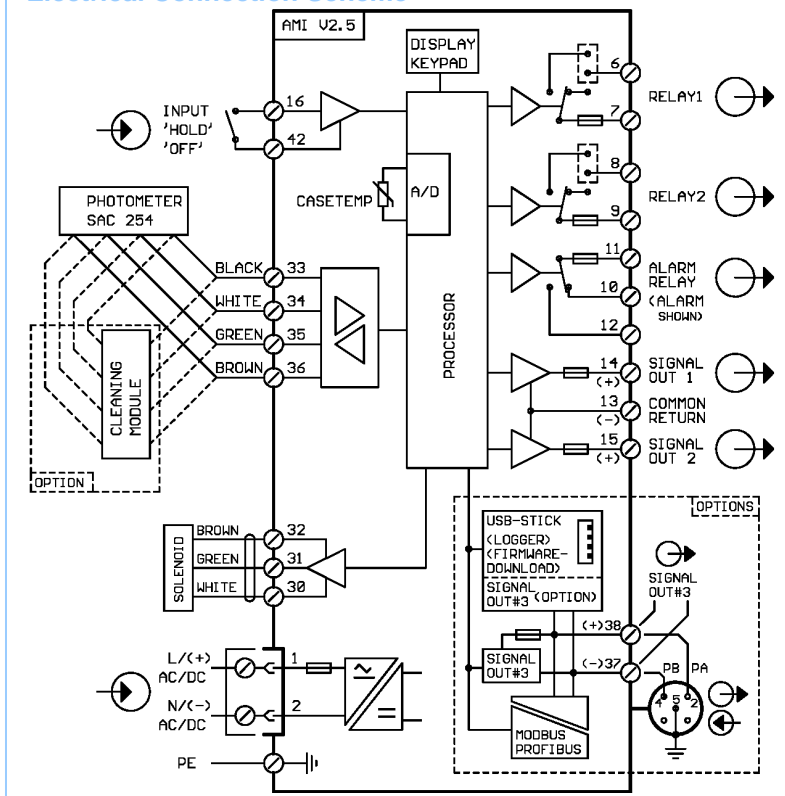
No data loss after power failure, all data is saved in non-volatile memory.
Overvoltage protection of in- and outputs.
Galvanic separation of measuring inputs and signal outputs.

Transmitter temperature monitoring
with programmable high/low alarm limits.

Real-time clock with calendar

For action time stamp and preprogrammed actions.

Electrical Connection Scheme



1 Alarm relay

One potential free contact for summary alarm indication for programmable alarm values and instrument faults.
Maximum load: 1A / 250 VAC

1 Input

One input for potential-free contact.
Programmable hold or remote off function.

2 Relay outputs

Two potential-free contacts programmable as limit switches for measuring values, controllers or timer for system cleaning with automatic hold function.
Rated load: 1A / 250 VAC

2 Signal outputs (3rd as option)

Two programmable signal outputs for measured values (freely scaleable, linear or bilinear) or as continuous control output (control parameters programmable) as current source. 3rd signal output selectable as current source or current sink.
Current loop: 0/4 - 20 mA
Maximum burden: 510 Ω

Control functions

Relays or current outputs programmable for 1 or 2 pulse dosing pumps, solenoid valves or for one motor valve.
Programmable P, PI, PID or PD control parameters.

1 Communication interface (option)

- RS485 interface (galvanically separated) with Fieldbus protocol Modbus RTU or Profibus DP
- 3rd Signal output
- USB interface (Logger download)

Monitor Data

Sample conditions

Flow rate: 2 to 12 l/h
Temperature: 5 to 30 °C (not higher than ambient temp.)
Inlet pressure: 0.5 to 10 bar
with flow controller option
Outlet pressure: pressure free

Prefiltration recommended in case of high particle load.
Install in a vibration free environment.
No Oil.

Connections

Sample inlet: Hose nozzle with 1/4" for tube Ø 10 mm
Sample outlet: for tube Ø 20 mm

Panel

Dimensions: 400 x 850 x 150 mm
Material: white PVC
Total weight: 12.0 kg