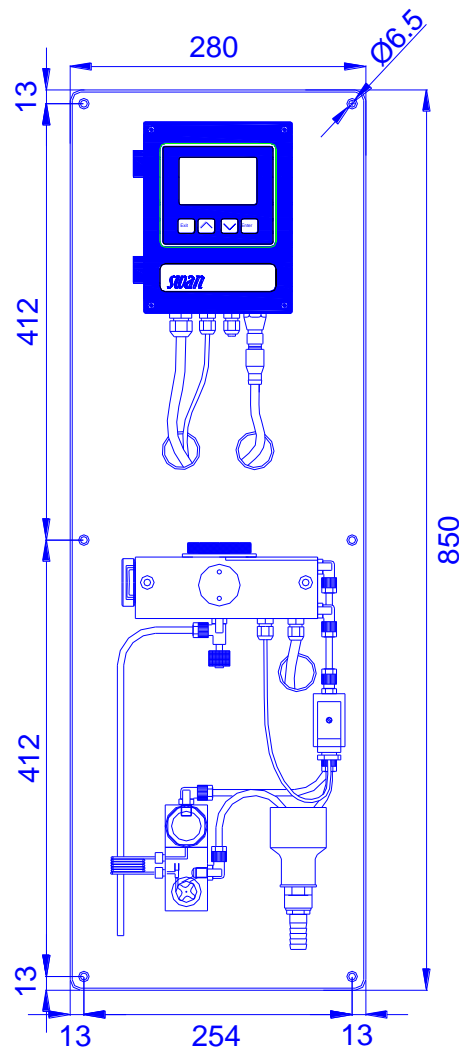


Nephelometric system for the automatic and continuous measurement of low level turbidity in pure water with up to 10 bar sample pressure.

Monitor AMI Turbitrack

- High precision nephelometer complying with ISO 7027 (EN 27027, DIN 38404)
- Measurement range: 0.000 - 100.0 FNU/NTU Automatic range switching.
- Precision: ± 0.001 FNU/NTU or 1% of reading.
- Response time: typically $T_{90} < 15$ sec (after sample entry at 10 l/h)
- Manual verification with high precision secondary standards.
- Automatic purging of optical measurement chamber in programmable intervals.
- Pressure tight sample system up to 10 bar avoids outgassing of sample.
- Transmitter, turbidity sensor, flow cell, flow controller and sensor mounted on panel for immediate use.
- Transmitter with large backlit graphic display for the reading of measuring value, flow and operating status. Full text menu driven user interface. Storage of calibration history.
- Two signal outputs for measuring values or as control outputs.
- Potential-free alarm contact as summary alarm indication for programmable alarm values and for instrument faults.
- Two potential-free contacts programmable as limit switch or PID-control.
- Input for potential-free contact with programmable function.
- Factory tested and calibrated with formazine standards, ready for use.



Order Nr.	Monitor AMI Turbitrack	A-25.411.200
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

Turbidimeter System

Turbidimeter with flow controller.

Measurement range:
0.000 - 100.0 FNU/NTU with automatic range switching

Precision:
±0.001 FNU/NTU or 1% of reading with automatic purging of optical chamber in programmable intervals.

Transmitter Specifications and Functions

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.

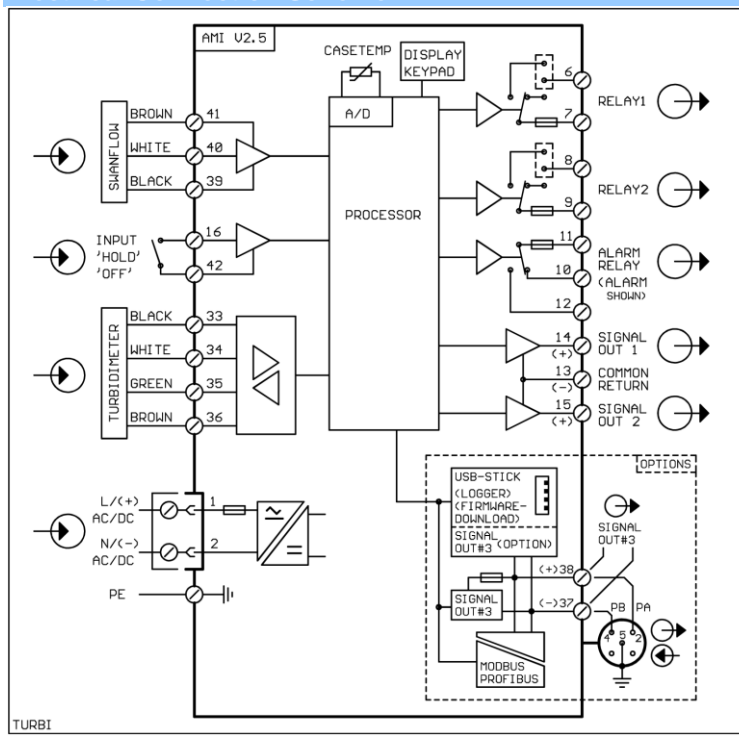
1 Alarm relay

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

1 Input

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

Electrical Connection Scheme



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: 1 A / 250 VAC

2 Signal outputs (3rd as option)

Two programmable signal outputs for measured values (freely scalable, 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
- HART interface

Monitor Data

Sample Conditions

Sample temperature: 1 - 40 °C
Sample flow: 5 - 20 l/h
Sample pressure: 1 - 10 bar

Connections

Sample inlet: Serto 6 mm
Sample outlet: pressure free
(funnel with connection for flexible tube 15 x 20 mm)

Panel

Panel dimensions: 280 x 850 x 200 mm
Panel material: PVC
Total monitor weight: 7.6 kg