

Monitor AMI-II Pool

Data sheet no. DenA21523X00



Complete monitoring system for the automatic, continuous measurement of pH and redox potential (ORP) in water.

Application examples

- Monitoring quality of pool water.

Measuring range

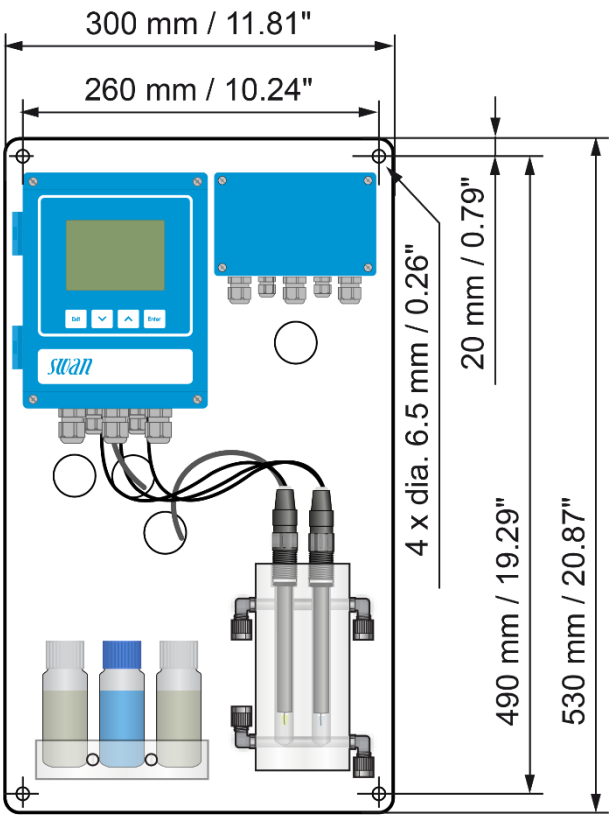
- 1.00 to 13.00 pH and –1500 to +1500 mV.
- Automatic temperature compensation according to Nernst.
- Measured value is compensated to 25 °C.

Instrument features

- **Transmitter AMI-II Dual pH/Redox**
in a rugged aluminum enclosure (IP66).
- **Flow cell**
with integrated sample flow detection and Pt1000 (Class A, DIN EN 60751) temperature sensor.
- For use with Swansensor pH/Redox Standard (combined electrodes with gel electrolyte).
- Optional AMI-II Relay Box for direct power supply and control of dosing devices, e.g. one or two pulse dosing pumps, solenoid valves or one motor valve.
- Factory tested, ready for installation and operation.

Control functions

- Signal outputs and potential-free contacts flexibly configurable as control outputs
- Optional AMI-II Relay Box for direct power supply and control of dosing devices, e.g. one or two solenoid valves or one motor valve.
- Relay input to freeze the measured value or to interrupt control in automated installations.



Monitor AMI-II Pool with optional AMI-II Relay Box.

Order numbers: Monitor AMI-II Pool		A-21.523._00
Power supply	100 – 240 VAC, 50/60 Hz.....	1
	10 – 36 VDC.....	2
Option 1	RS485 interface with Modbus RTU or Profibus protocol	A-81.470.0X0
	HART interface	A-81.470.030
	Two additional 0/4 – 20 mA signal outputs	A-81.470.040
Option 2	Swansensor pH Standard	A-87.120.200
Option 3	Swansensor Redox Standard	A-87.420.200
Option 4	AMI-II Relay Box	A-89.812.200



pH and ORP Measurement

Galvanic separation between the two sensor inputs.

Input resistance: $>10^{13} \Omega$

pH measurement

Measuring range: 1.00 to 13.00 pH

Resolution: 0.01 pH

Reference temperature: 25 °C

ORP measurement

Measuring range: -1500 to +1500 mV

Resolution: 1 mV

Temperature compensation according to Nernst.

Calibration solutions table

Programmable table for pH buffers and ORP calibration solution. SWAN buffers (pH 7 and 9) pre-programmed.

Auxiliary sensors

- Temperature measurement with Pt1000 type sensor (DIN class A).
Measuring range: -30 to +250 °C
Accuracy (0-50 °C): ± 0.25 °C
Resolution: 0.1 °C
- Sample flow detection.

Transmitter Specifications and Functionality

Electronics case: Cast aluminum
Protection degree: IP66 / NEMA 4X
Display: backlit LCD, 74 x 53 mm
Electrical connectors: screw clamps
Ambient temperature: -10 to +50 °C
Humidity: 10 - 90% rel., non-condensing

Power supply

AC version: 100 – 240 VAC (± 10 %),
50/60 Hz (± 5 %)
DC version: 10 – 36 VDC
Power consumption: max. 35 VA

Operation

User menus in English, German, French, Spanish and Italian.
Separate, menu-specific password protection.

Safety features

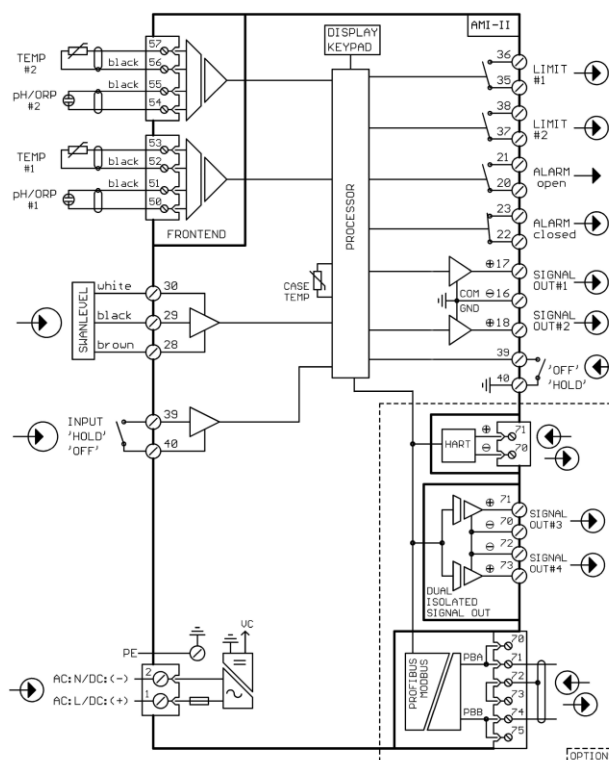
No data loss after power failure, all data is saved in non-volatile memory.
Overvoltage protection of inputs and outputs.
Galvanic separation of measuring inputs from signal outputs.

Alarm relay

Two potential-free contacts for summary alarm indication for programmable alarm values and instrument faults (one normally open and one normally closed contact).

Maximum load: 100 mA / 50 V

Electrical Connection Scheme



Input

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

Relay outputs

Two potential-free contacts programmable as limit switches for measured values, controllers or timers with automatic hold function.

Rated load: 100 mA / 50 V

Signal outputs

Two or four (with optional communication interface) programmable signal outputs for measured values (freely scalable, linear or bilinear) or as controller outputs.
Current loop: 0/4 – 20 mA
Maximum burden: 510 Ω
Type: current source

SD card interface

Possibility to record measured values and diagnostic data to an SD card.
SD card included.

Communication interface options

- Two additional signal outputs, galvanically separated
- RS485 interface with Modbus RTU or Profibus DP protocol, galvanically separated
- HART interface

Monitor Data

Sample conditions

Flow rate: min. 30 L/h
Temperature: max. 50 °C
Operating pressure: max. 2 bar

Sample connections

Sample inlet and outlet:
8 mm Serto tube adapter (PA)

Panel

Dimensions: 300 x 530 x 150 mm
Material: white PVC
Total weight: 5 kg

