

# 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

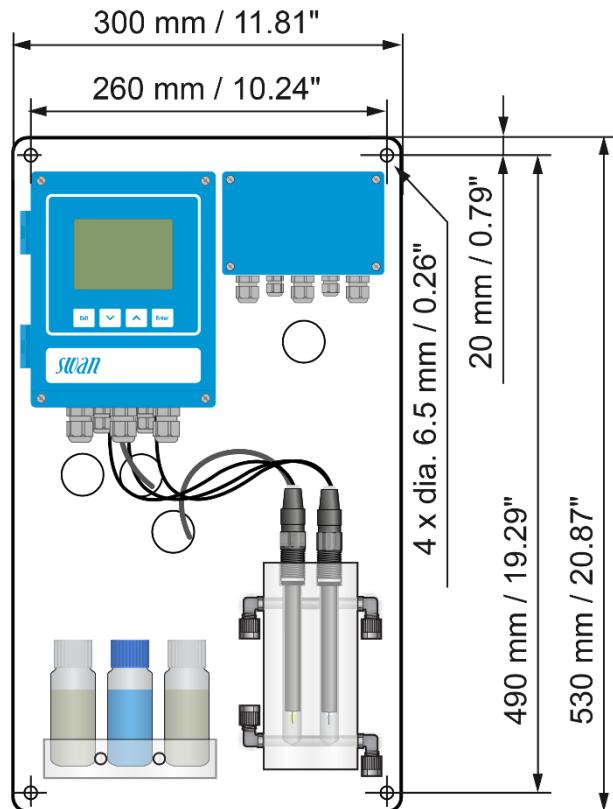
- 1.00 to 13.00 pH and -1500 to +1500 mV.
- Automatic temperature compensation according to Nernst.
- Measured value is compensated to 25 °C.

## 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).
- Factory tested, ready for installation and operation.

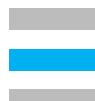
## Control functions

- 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 ..... 10 – 36 VDC .....	1 2
Option 1	RS485 interface with Modbus RTU or Profibus protocol ..... HART interface ..... Two additional 0/4 – 20 mA signal outputs .....	A-81.470.0X0 A-81.470.030 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.

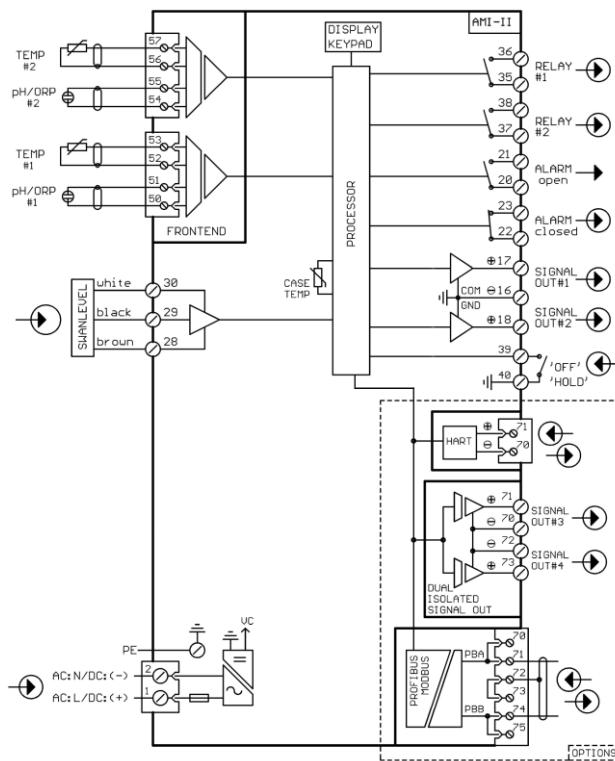
### Transmitter temperature monitoring

With programmable high/low alarm limits.

### Real-time clock with calendar

For action time stamp and preprogrammed actions

## Electrical Connection Scheme



### 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 resistive

### 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 resistive

### 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

