

Monitor for continuous measurement of pH and redox (ORP) potential in pool water.

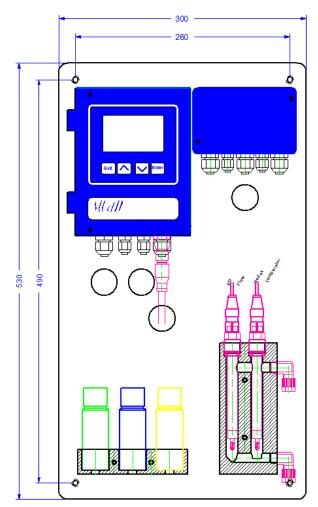
# Monitor AMI pH/mV:pH/mV Pool

Complete system mounted on PVC panel:

- Dual channel **transmitter AMI pH/mV : pH/mV** in a rugged aluminum enclosure (IP 66).
- Flow cell for pool water applications with digital sample flow indicator and a NT5K temperature sensor.
- Factory tested, ready for installation and operation.
- For use with:
- Swansensor pH Standard and Redox Standard.

# **Specifications:**

- Measuring ranges: 1 to 13 pH respectively-400 to +1200 mV
- Simultaneous measurement of pH and redox (ORP) potential with maintenance-free combination electrodes, sample temperature and sample flow check.
- Big backlit LC display for the reading of measuring value, sample temperature, 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 (3<sup>rd</sup> output optional).



Order Nr.	Monitor AMI pH/mV : pH/mV Pool	A–21.311.010
Option:	[ ] 3 <sup>rd</sup> current signal output (0/4 – 20mA)	A-81.410.020
	[ ] Profibus DP interface	A-81.420.020
	[ ] HyperTerminal interface (RS-232)	A-81.420.010
	[ ] Modbus interface	A-81.420.022
	[ ] USB interface	A-81.420.040
Option:	[ ] Swansensor pH Standard	A-87.120.200
Option:	[ ] Swansensor ORP Standard	A-87.420.200



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# Monitor AMI pH/mV:pH/mV

Data sheet No. DenA21311010

# **pH/ORP Measurement**

Signal input galvanically separated Input resistance:  $> 10^{13} \Omega$ 

#### pH measurement

Measuring range with: Resolution:	pH 1 to 13 0.01 pH	
	0.01 pm	
Reference temperature:	25 °C	
Automatic temperature compensation		

according to Nernst.

## **ORP** measurement

Measuring range with:-400 bis 1200 mV Resolution: 1 mV

#### Calibration solutions table

Programmable table for pH buffers and ORP calibration solution.

#### Temperature measurement

Measuring range: -30 to +130 °C Resolution: 0.1 °C

Transmitter Specifications and Functionality

Electronics case:Cast aluminumProtection degree:IP 66 / NEMA 4XDisplay:backlit LCD, 75 x 45 mmElectrical connectors:screw clampsDimensions:180 x 140 x 70 mmWeight:1.5 kgAmbient temperature:-10 to +50 °CHumidity: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.

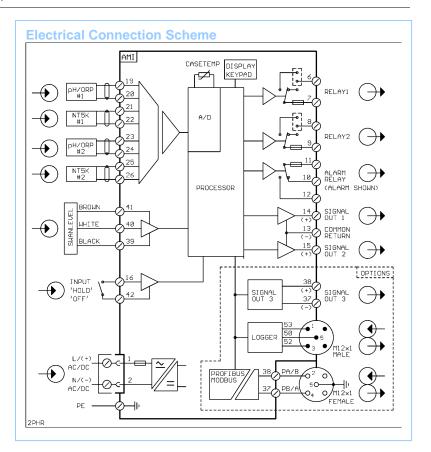
Display of process value, sample flow, alarm status and time during operation. Storage of event log, alarm log and calibration history.

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: 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 (3<sup>rd</sup> as option)

Two programmable signal outputs for measured values (freely scaleable, linear or bilinear) or as continuous control output (control parameters programmable). Current loop: 0/4 - 20 mA

ounent 100p. 0/4 - 20 m	
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)

- RS232 interface for logger download to PC with SWANTerminal
- RS485 interface (galvanically separated) with Fieldbus protocol Modbus or Profibus DP
- 3rd Signal output
- USB interface

# **Monitor Data**

#### Sample conditions

Flow rate:	min. 30 l/h
Temperature:	up to 50 °C
Inlet-, Outlet pressure:	0.2 to 2 bar

## Flow cell and connections

Flow cell made of acrylic glass. Sample in-, outlet: Tube 6x8 mm, PE

### Panel

300 x 530 x 150 mm
white PVC
9.0 kg