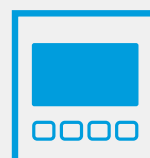




Transmitters, Sensors  
and Flow Cells



## Conductivity

### Application

Water Steam Cycles,  
Water Treatments

Purified Water (PW) and  
Water for Injection (WFI) in  
Pharmaceutical Applications



### Transmitters

#### AMU-II Powercon

#### Sensor

- Two-electrode sensor with integrated Pt1000 temperature probe

#### AMU-II Pharmacon

- Two-electrode sensor with integrated Pt1000 temperature probe

### Temperature Compensations

- Selectable for various different sample properties

- Displays uncompensated and temperature-compensated (25°C) conductivity simultaneously

### Measurement Parameters

#### Conductivity

0.055  $\mu\text{S}/\text{cm}$  to 30  $\text{mS}/\text{cm}$

#### Conductivity

0.005 to 2000  $\mu\text{S}/\text{cm}$

#### Sensors



#### Flow Cells



### Accuracy

$\pm 1\%$  or  
 $\pm 0.001\ \mu\text{S}/\text{cm}$

$\pm 1\%$  or  
 $\pm 0.02\ \mu\text{S}/\text{cm}$

$\pm 2\%$  up to 500  $\mu\text{S}/\text{cm}$   
 $\pm 3\%$  above 500  $\mu\text{S}/\text{cm}$

### Miscellaneous

Titan electrode  
with  $\frac{3}{4}$ " NPT  
thread connection

Stainless steel  
electrode for  
applications with  
retractable wet-tap  
valve  $\frac{3}{4}$ " NPT  
thread connection

$1\frac{1}{2}$ " Tri-Clamp or  
 $\frac{3}{4}$ " NPT thread connection

**Application** Chemical, Food & Dairy, Refinery, Pulp & Paper, Metal Finishing and Wastewater

Surface-, Potable- and Cooling Water



**Transmitters** **AMU Inducon**

**Sensor Connections**

- Inductive (toroidal) sensor with built-in Pt1000 temperature probe

**Temperature Compensations**

- With selectable coefficient or non-linear function for natural waters according to EN 27888/DIN 38404

**Measurement Parameters**

**Conductivity**  
0.1 to 2000 mS/cm

**Salinity as NaCl**  
Concentration in %

**Optional conversion**  
**NaCl, NaOH and acids**  
Concentration in %

**TDS as NaCl**  
Concentration in %

**Sensors**



**Flow Cells**

**Accuracy** ± 0.01 %

**Miscellaneous** PFA Teflon® with 2" sanitary clamp or poly-propylene (PP) with ¾" NPT thread connection

**AMU Solicon4**

- Four-electrode sensor with built-in Pt1000 temperature probe

- With selectable coefficient or non-linear function for natural waters according to EN 27888/DIN 38404

**Conductivity**  
0.055 µS/cm to 100 mS/cm

**Salinity as NaCl**  
Concentration in %

**NaCl, NaOH and acids**  
Concentration in %

**TDS as NaCl**  
Concentration in %



± 1.5 % or  
± 0.2 µS/cm

± 1 % or  
± 0.2 µS/cm

Sample temperatures up to 90°C (Inline)

Sample temperatures up to 120°C (Inline) 1" thread



## Resistivity/ Conductivity

Application High Purity Water



Transmitters **AMU Rescon**

Sensor  
Connections

- Two-electrode sensor with built-in NT5k temperature probe

Temperature  
Compensations

- Selectable for different sample properties

Measurement  
Parameters

Specific Conductivity  
0.055 to 1000  $\mu$ S/cm  
Resistivity  
0.001 to 200 M $\Omega$ /cm

Sensors



Flow Cells



Accuracy  $\pm 0.5\%$  up to 20  $\mu$ S/cm  
 $\pm 0.5\%$  up to 20 M $\Omega$ /cm

Miscellaneous Sample temperatures  
up to 90°C (Inline)  
3/4" NPT thread connection

## Dissolved Oxygen

High Purity Water



**AMU-II Oxytrace**

- Oxytrace G oxygen sensor with integrated NT5k temperature probe

- Automatic compensation of temperature and air pressure

Oxygen Dissolved  
0 ppb to 20 ppm  
Saturation  
0 to 200 %



$\pm 0.3\%$



# pH Redox Potential

Application Various Applications



## Transmitters **AMU-II pH/Redox**

Sensor  
Connections

- pH or ORP sensor with Reference electrode and Pt1000 temperature probe

Temperature  
Compensations

- Automatic temperature compensations according to Nernst or without correction functions
- Programmable values for pH buffer and redox calibration solutions

Measurement  
Parameters

**pH Range**  
0 to 14  
**Redox Potential (ORP)**  
-500 to +1500 mV

Sensors



Flow Cells



Applications

Potable Water,  
Swimming  
Pools

Wastewater,  
Cooling Water

Power  
Plants

High Purity  
Water



## Common features of Swan AMU and AMU-II Transmitters



|                      |  |
|----------------------|--|
| Dimensions           | 92 × 92 × 120 mm (DIN IEC 61554:2002-08) – designed for panel installation in a Noryl® resin enclosure   |
| Input                | <ul style="list-style-type: none"><li>• Potential-free contact for hold, remote off or sample flow meter</li></ul>   |
| Output               | <ul style="list-style-type: none"><li>• Two scalable current outputs (0/4-20 mA)</li><li>• AC Version: 100-240 VAC</li><li>• DC Version: 10-36 VDC</li></ul> |
| Alarm Contacts       | Potential-free alarm contact as summary alarm indication for programmable alarm values and for instrument faults   |
| Contacts             | Two potential-free contacts programmable as limit switch or PID-control  |
| Languages for AMU-II | Chinese, English, French, German, Spanish  |

## Swan AMU Transmitter Concept



Swan instruments are delivered as fully functional, ready-to-use instruments. This ensures easy system integration as well as user-friendly operation and maintainability.

Highest standards in development and production assure the instrument quality expected by our customers.

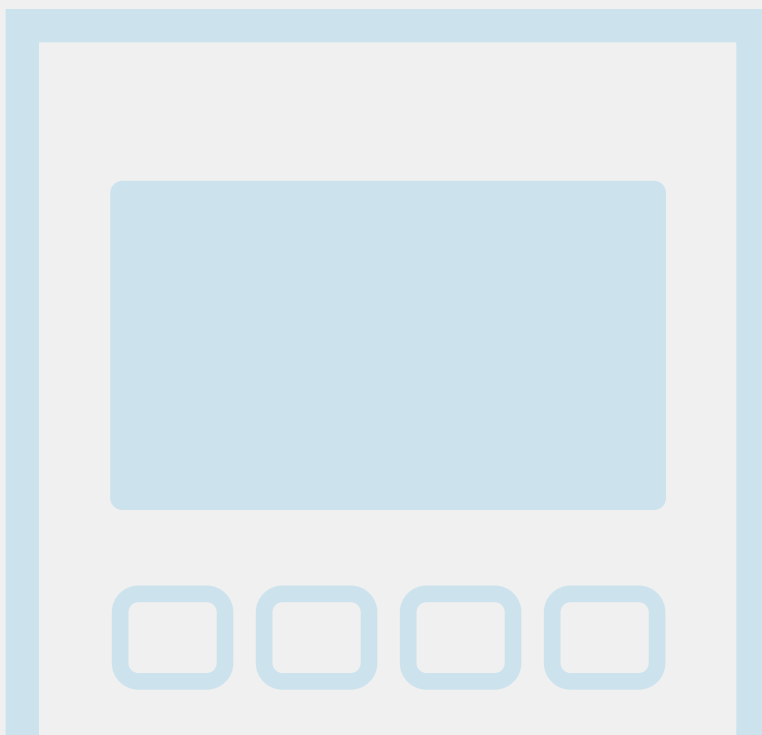
**SWISS  MADE**

### Full System Integration

- The size of the transmitter complies with DIN IEC 61554:2002-08 which allows it to be mounted in control panels easily
- The transmitter case is produced from Noryl® resin and its front panel has a IP54 protection
- Various communication possibilities with Profibus, Modbus, HART-Protocol and USB-interface
- Simple process engineering with regulation functions (P, PI, PID or PD), relay or analog output

### Instrument Features

- Uniform menu navigation for easy operation – one platform for all instruments
- The user interface with intuitive on-screen instructions is available in 5 different languages
- Large, backlit LC display and simple menu-driven operation allows easy reading
- The self-explanatory maintenance procedures can be easily performed by the operating company





- Swan Headquarters
- Swan Subsidiaries
- Distributors

