## **Technical data**

| Display                          | High definition TFT display with VGA resolution (800 x 400), graphics-capable, aspect ratio 16:9                                   |  |  |  |
|----------------------------------|--|--|--|--|
| User interface                   | Touch screen, icon-based menus, 5 hotkeys for frequent actions, comprehensive help function  |  |  |  |
| Security                         | 5 password levels, configurable for direct and remote access   |  |  |  |
| Available languages              | Choice of 16 languages   |  |  |  |
| Measurement parameters/ranges    | pH 0-10 (temperature-compensated)  |  |  |  |
|                                  | Redox 0-1,000 mV (Analyt 3 only)   |  |  |  |
|                                  | Free chlorine 0.01-10 ppm/mg/l   |  |  |  |
|                                  | Temperature 2 x 0-50 °C, 1 x 0-75 °C   |  |  |  |
| Measurement amplifier tolerances | pH, chlorine and redox (Analyt 3 only) max. +/-0.2 % of full scale   |  |  |  |
|                                  | Temperature: max. +/-0.5 °C  |  |  |  |
| Measurement inputs               | pH, redox (PoolManager® PRO: free chlorine) and temperature  |  |  |  |
| pH measurement                   | Measurement via glass electrode  |  |  |  |
|                                  | Unidirectional regulation; bidirectional optionally available  |  |  |  |
|                                  | pH measurement range 0-10 pH (temperature-compensated)   |  |  |  |
|                                  | pH resolution 0.1 pH   |  |  |  |
|                                  | pH calibration 1 or 2-point calibration  |  |  |  |
| Chlorine measurement             | Measurement via open, pressure resistant, potentiostatic measuring cell (3-electrode system  |  |  |  |
|                                  | Unidirectional regulation  |  |  |  |
|                                  | Cl measurement range 0.01-10 mg/l  |  |  |  |
|                                  | Cl resolution 0.01 mg/l  |  |  |  |
|                                  | Cl calibration 1-point calibration   |  |  |  |
| Temperature measurement          | Measurement at the measuring cell via PT 1000 sensor   |  |  |  |
|                                  | 2 further temperature measurements possible (PT1000, KTY83 and KTY16 can be used)  |  |  |  |
|                                  | T measurement range 2 x 0-50 °C, 1 x 0-75 °C   |  |  |  |
|                                  | T resolution 0.1 °C<br>T calibration 1-point calibration   |  |  |  |
| Regulation characteristics       |  |  |  |  |
| (pH and chlorine)                | Proportional regulation  |  |  |  |
| Dosage outputs                   | 3 relay switching outputs  |  |  |  |
|                                  | Potential-free or 230 V~ (max. 2 A)  |  |  |  |
|                                  | Pulse-width or pulse-frequency modulation (max. 240 pulses/minute)   |  |  |  |
| Inputs/outputs for auxiliary     | 4 universal switching inputs (potential-free)  |  |  |  |
| functions                        | 4 universal relay switching outputs, potential-free or 230 V~ (max. 4 A)   |  |  |  |
|                                  | Unused dosing outputs  |  |  |  |
| Monitoring functions             | Flow rate in measurement water circuit   |  |  |  |
|                                  | Pressure switch (optional)   |  |  |  |
|                                  | pH level   |  |  |  |
|                                  | Disinfection level   |  |  |  |
| Upgrade options                  | 3 slots for additional modules   |  |  |  |
| Signal current outputs           | Up to 8 x 4-20 mA (option)   |  |  |  |
| Alarm relay                      | Potential-free or 230 V~ (max. 4 A)  |  |  |  |
| 4-20 mA current outputs          | PM5-SA4 4-20 mA Converter plug-in module (Art. no. 127011) with four 4-20 mA current outputs (option); 1 or 2 modules can be used  |  |  |  |
| Interfaces                       | LAN (RJ45) 100 Mbit/s (at least CAT5 cable), USB, CAN, SD card slot;<br>PM5-4 Relay (Art. no. 127016), 4 universal relays (option) |  |  |  |
| Communication                    | Embedded web server and web-based graphical user interface   |  |  |  |
| Operation log                    | Saves all events for 1 year  |  |  |  |
| Electrical connection            | 100-240 V~, 50/60 Hz   |  |  |  |
| Temperature ranges               | Operating temperature0 °C - +50 °CStorage temperature-20 °C - +70 °C   |  |  |  |
| Humidity                         | 0-90 %, non-condensing   |  |  |  |
| Protection class of controller   | IP 65  |  |  |  |
| Protection class of pump housing | IP 65  |  |  |  |
| Dimensions                       | 715 x 495 x 125 mm (WxHxD)   |  |  |  |
| Dimensions                       |  |  |  |  |

# Analyt product information



costs

The Analyt can be controlled using the touch screen on the device, or from an external device connected to the Analyt via a local area network, for example a PC located in a control room, a tablet, or similar. If the local area network is connected to the internet, users can access the Analyt's full functionality from any location. The Analyt works remotely in exactly the same way as when it is operated from the touch screen on the device. The constant access to information that the Analyt provides hugely increases the reliability of the pool system. If the Analyt detects problems, it emits an acoustic signal, its screen flashes and - if it is being accessed remotely - it sends out an email. By accessing the Analyt from a mobile device such as a smartphone, you can maintain complete control of your swimming pool water care wherever you are.

An illustration of all measurements over a period of around one year can be called up on the device's display. Together with the Analyt's event log, this gives the user a comprehensive picture of the pool's operating history. All measurements can be read out and archived via the device's USB port or over the internet.

The Analyt's chlorine measuring cell is based on the principle of potentiostatic measurement, and features electrodes made from gold and platinum. This combination of high quality metals allows it to determine the free chlorine content of the water very accurately. The measuring cell is pressure resistant, self-cleaning and extremely durable. All components are easy to access and disassemble for maintenance purposes, keeping interruptions to pool operation to a minimum.

All types of dosing pumps can be used with the Analyt. These can be controlled via the device's supply voltage, or can be potentialfree. Where diaphragm dosing pumps are used, the individual strokes can be controlled directly from the device, if desired. Pumps can also be connected to the device's 4-20 mA interface.

The Analyt's state-of-the-art, high-quality technical components are contained in a stylish and contemporary housing that not only looks good, but also protects the delicate sensors inside. Despite this effective protection the housing is easy to open by hand, making it quick and simple to monitor, calibrate and maintain all of the device's electrodes.



150 m<sup>3</sup>.



## Analyt – the professional pool management system

The latest Analyt is a highly efficient and precise automatic measurement, control and dosing system for swimming pool water care. Its wide range of connection options for external devices means that it can also act as the main control unit for a swimming pool. It can be used to control the pool's circulation pump, lighting, heating, and much more. As a result, many control equipment items are no longer needed, noticeably reducing

## Analyt 3 Hotel – the Analyt model with a dosing system

The Analyt 3 Hotel comes ready fitted with high quality peristaltic pumps idea for hotel and other private swimming pools with a volume of up to

| 7.25           | 0.65      | field (mV)                            | 25.0             | P.         |
|----------------|-----------|---------------------------------------|------------------|------------|
| Automatic      | Automatik |                                       | Automatic        | E C        |
| 6 D-4% 🚺<br>04 | CR D+ 0%  | -                                     | G Heating        | A Land     |
| G Post Lights  |           | • • • • • • • • • • • • • • • • • • • |                  | ₹<br>A     |
|                | Shirt.    | • Calimin                             | u (1 sea ra masi | U)<br>With |

### Features at a glance

- Large 7" (17.8 cm) Wide VGA TFT display with LED backlighting
- Easy, intuitive operation using a touch screen
- Comprehensive help function
- Wide range of connection options for control of external devices
- Embedded web server allows remote access to all functions in real time via local area network or internet
- Wide range of password protection options
- Measures pH and chlorine/bromine levels (Analyt 3 only: redox also)
- Analyt 3 and Analyt 3 Hotel conform to DIN 19 643, ÖNORM M 5872 and SIA 385/1-2000
- Option of bidirectional pH regulation
- Temperature compensated pH monitoring
- Pressure resistant, potentiostatic gold/platinum measuring cell for accurate measurement of chlorine content
- Easy calibration and maintenance of chlorine measuring cell
- Extensive alarm functions. Alarms can be set acoustically, visually, via relay outputs, or as emails (if internet connection is available).
- Configurable graphical display of measurements
- Long-term log book function for recording pool's operating history
- Data (e.g. measurements) can be exported via USB or over the internet (if internet connection available)
- 4-20 mA outputs (option), 4 or 8 as required
- 4 universal switching inputs (potential-free)
- The flow rate of the dosing pumps can be put in the software in order to calculate the dosage
- Dosing pumps are controlled via an On/Off signal; individual strokes of diaphragm dosing pumps can be controlled directly from the device
- Measuring cell with sampling water tap and flow rate monitoring and adjustment functions
- Eco mode switches off display when not needed
- Option of controlling a dosing pump for flocculants
- Easy, rapid access to the sensors
- Stylish design



## Models available

The Analyt is available in three different versions:

Analyt 2 | Art. no. 177 600

For disinfecting pools with chlorine (or bromine) Measures and regulates pH and free chlorine (free bromine) content

### Analyt 3 | Art. no. 177 800

For disinfecting pools with chlorine (or bromine)

Measures and regulates pH and free chlorine (free bromine) content, redox potential

### Analyt 3 Hotel | Art. no. 177 810

For disinfecting pools with chlorine (or bromine)

Measures and regulates pH and free chlorine (free bromine) content, redox potential Fitted with two peristaltic pumps for pH Minus/pH Plus and liquid chlorine dosing

### Consists of:

- Analyt controller, mounted on plate, 2-component housing
- Operating instructions
- Fitting accessories
- Analyt 3 Hotel only:
- 2 peristaltic pumps (for pH regulation and liquid chlorine dosing)
- Suction lances and injection valves
- Set of hoses
- Test kit; buffer and cleaning solution

## **Operating fluids**

### pH Minus liquid

Highly concentrated liquid acid solution for lowering the pH pH Plus liquid

Highly concentrated liquid alkaline solution for raising the pH Analyt 3 Hotel: ChloriLiquid®\*

Ready-to-use liquid disinfectant for continuous chlorination; with stabiliser and clarifying effect

### Options

### PM5-SA4 4-20 mA converter | Art. no. 127 011

Flockmatic | Art. no. 127 410

Quick-action suction button







pH sensors and cell for potentiostatic measurement of free chlorine (Analyt 3/Analyt 3 Hotel also measure redox potential)

Plug-in module for activating the four 4-20 mA current outputs for retransmitting measurements (e.g. to remote displays)

Flocculant dosing pump with a fixed flow rate of 10 ml/h

Powered by a robust stepper motor with a fast suction button

Supplied with hose, suction lance and injection valve

Flockmatic Vario | Art. no. 127 460

Flocculant dosing pump with flow rate variable from 2.5 to 600 ml/h

Powered by a rugged stepper motor

Alarm indicates when container is empty

Supplied with hose, suction lance and injection valve