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
	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 functions	4 universal switching inputs (potential-free)
	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; 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 temperature 0 °C – +50 °C
	Storage 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)

Analyt product information

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 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

BAYROL
your pool & spa water expert

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 potential-free. 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.

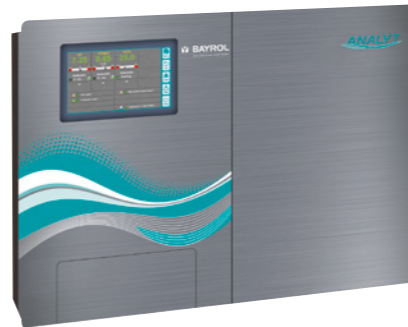## Analyt 3 Hotel – the Analyt model with a dosing system

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 150 m³.

ANALYT

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

Options

PM5-SA4 converter 4-20 mA Art. no. 127 011	Plug-in module for activating the four 4-20 mA current outputs for retransmitting measurements (e.g. to remote displays)
Flockmatic Art. no. 127 410	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. Quick-action suction button. Alarm indicates when container is empty Supplied with hose, suction lance and injection valve.

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

Consists of:

- Analyt controller, mounted on plate, 2-component housing
- pH sensors and cell for potentiostatic measurement of free chlorine (Analyt 3/Analyt 3 Hotel also measure redox potential)
- 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