

seko

Solutions for **Measurement & Analysis**



Your Choice,
Our Commitment



Content

Introduction page 04

Controllers & Sensors page 06

- Kontrol 800 Tech, Kontrol 800, Kontrol 502, Kontrol 500, Kontrol 100, Kontrol 50, Kontrol 42, Kontrol 40
- pH, ORP, electrical and inductive conductivity, chlorine and disinfectants, dissolved oxygen, turbidity and flow sensor and probes
- Accessories

Metering, measuring and control systems page 16

- Kontrol 800 Panel, ECS 500 Panel, Kontrol Guard Tech

Multi-parameter photometric system page 20

- Photometer Systems

FlowMeters page 24

- SMAG 103

Additional Information page 26



A Worldwide Group at your service

Globally Present, Locally Active

Our Global presence ensures that we can support our Customers wherever they are. Supported by teams in over 20 countries, as well as by our accredited Partner Distributor network, we ensure professional, local customer support in over 120 countries, with the added benefit of rapid delivery of goods to meet your needs.

All this backed up and supported by a world-class team of Technical Customer Service, able to provide all the back up or technical support needed. With ISO certificated production sites in Europe, the Americas and Asia, we are close to our customers and fully compliant with all local norms both in terms of our product designs as much as our production facilities.

How SEKO works for You

From the spark of an idea, through to the delivery of a solution, SEKO is with you all the way

SEKO supports its customers in every phase of a project, from the inception of an idea or request, through design and testing to launch and installation. Our in-house research, design and development teams work closely with the local teams, drawing on customer and market inputs. Then using state-of-the-art technologies to optimize costs and using our own specifically designed test benches to ensure rigorous, robust testing, we ensure a quality solution is delivered quickly to market.

No matter which processes and applications are planned SEKO has a solution in the cleaning and hygiene of kitchens and laundries and surfaces of all types in applications like **Offices and Restaurants, Hospitals and Hotels, Retailers and Schools, Car Washes and Swimming Pools, Cooling Towers, Energy, Food & Beverage, Water & Gas Utilities Potable and Waste Water Treatment.**

1 Partnership Philosophy

Being a privately-owned business means that we are here for the long term and can plan projects with and for our Customers, where both parties benefit. It means we can rapidly take decisions to invest our resources to ensure our optimum solutions are delivered.

2 Your Business, Our Solutions

Our extensive product range represents a unique combination of design, development and implementation know how. With a wide and ever evolving range of products and ancillaries, we can offer specific and comprehensive solutions for a variety of industrial applications. Our solutions are conceived to fit seamlessly into your operation, optimizing the processes and applications

3 Uniquely Positioned

SEKO's 3 business units, Cleaning & Hygiene, Water & Industry and Industrial Processes puts us in a unique position to be able to respond to the widest range of business needs, with a broad range that allows you the Customer to deal with just one company, simple.

Measurement & Analysis

Controllers and Sensors

Ensuring that water quality is always at its best, balancing the variables that impact it, demands measuring and dosing systems with the highest accuracy.

SEKO's Controllers and Sensors are built with precision in mind and can function in both internal and external environments. Specifically conceived to fit a wide range of individual applications, they are available in different performance classes ensuring easy integration into every process environment.

Multi-parameter photometric system

SEKO's products offer very high precision and reproducible analysis results with minimum time and effort.

SEKO's multi-parameter control unit provides for real time determination of Free Chlorine (Photometric System), pH, Redox and Temperature. The system is equipped with a graphic display subdivided into areas for simultaneous display of all available measurements.

Metering and control systems

At the core of any operation where water quality is key, the ability to measure and control the quality quickly, accurately and with a reassurance constancy is paramount.

SEKO's measuring systems are built with precision in mind and that can function in both internal and external environments, specifically conceived to fit individual applications. Available in different performance classes they can be integrated into every process environment.

A photograph of a water treatment plant. In the foreground, there are large blue pipes running along a concrete walkway. A metal railing is visible on the right side of the pipes. In the background, there are more pipes, a white cylindrical tank with a red top, and some green trees under a clear blue sky.

Controllers & Sensors

Ensuring that water quality is always at its best, balancing the variables that impact it, demands measuring and dosing systems with the highest accuracy.

SEKO's Controllers and Sensors are built with precision in mind and can function in both internal and external environments. Specifically conceived to fit a wide range of individual applications, they are available in different performance classes ensuring easy integration into every process environment.

Kontrol

Single, double, multi parameter controllers

The Kontrol Range represents SEKO's most advanced solution for the comprehensive monitoring of multiple water parameters. The result of SEKO's dedication to innovation and a passion for measurement solutions and systems to meet increasingly complex and large customers' technical requirements, Kontrol provides high levels of measuring accuracy and control with simple functionality.

- The range enables the operator to monitor key values to suit almost any application covering the following parameters: pH, ORP, Conductivity, Chlorine, Dissolved oxygen, Turbidity, Suspend Solid, Peracetic Acid, Ozone, Bromine, Peroxide, Flow rate and Temperature.



All models in the Kontrol Range have a standard calibration routine (or wizard calibration) to help end users through probe maintenance operations. Moreover, the controller is equipped with programmes that assist the installer when it comes to the management and replacement of the measurement electrodes, thanks to a clever "electrode quality" control function.

All models also benefit from having a traditional compensation measures providing the extra assurances on the accuracy and repeatability of measurements taken.

The range also features

- All Kontrol units are CE/UL certificated ensuring full health and safety compliance
- Easy to install and easy to maintain the electronic circuits
- High contrast image graphic display, and easy to read, self-explanatory icons
- Variable display backlighting allows the user to quickly understand the active operating mode

Kontrol 800 Tech Multi-parameter controller

The Kontrol 800Tech series are professional controllers designed for advanced water treatment applications. All models are equipped with analogue and digital outputs that can be set by the end user via software.

Equipped with programmes that assist the installer in the management, replacement of the measurement electrodes, using the **"electrode quality" control function**. The **data logger function** helps monetarise measurements supported by graphic line feedback.

Equipped with **independent and proportional control outputs**, 4 programmable frequency and 4 4 - 20 mA current outputs, an **RS485 serial port with MODBUS protocol**, 6 relay outputs, probe quality control and is enabled **for data collection**.



Graphic displays ensures a **fast set up** and final check of the programming data, while the **easy menu** enables a simple set up of the various options without the risk of forgetting anything.

Internal menu enables monitoring of statistics on the probe life and the controller operation.

Kontrol 800 Multi-parameter controller

Kontrol 800 are user-friendly controllers designed for simple and advanced water treatment applications requiring simultaneous control of a number of chemical parameters. All models are equipped with analogue and digital outputs that can be set by the end user via software.

Equipped with **independent and proportional control outputs**, 2 programmable frequency and 2 4 - 20 mA current outputs, an **RS485 serial port with MODBUS protocol**, 6 relay outputs, probe quality control and is enabled for **data collection**.

The alphanumeric display ensures **fast set up** and final check on the programming data. The **easy to use menu** enables a simple setting of the various options without the risk of forgetting anything and the **"electrode quality" function** allows the user to ensure optimum performance of the equipment.



The internal menu allows users to check the statistics on the **life of the probes and the operating life of the controller** while the data logger function provides information that helps **monetise the results** from the measurements.

Kontrol 502

Dual-parameter controller

The Kontrol 502 series are professional controllers designed for advanced high-end water treatment applications. All models are equipped with analogue and digital outputs that can be set by the end user via software, who has full programming autonomy.

Kontrol 502 has **independent and proportional control outputs** with active PID, an RS485 serial port with **MODBUS protocol**, an optional USB port, a probe quality control and a **comprehensive data collection capability**.

The controller assists the installer in the management, replacement of the measurement electrodes, by means of the **"electrode quality" control function**.



Features a **back-wash probe function** and a **remote alarm feature**, using dedicated relays.

Data logging functions allow users and management to **accurately track the performance** of their systems in use.

Kontrol 500

Single-parameter controller

Kontrol 500 are professional controllers designed for advanced water treatment applications. All models are equipped with analogue and digital outputs that can be set by the end user via software with full programming authority for the user.

The controllers are equipped with **proportional and independent control outputs with PID enabled**, an RS485 serial port with MODBUS protocol, a USB port on demand, a **quality control of the probe**, diverted outputs and a comprehensive data collection capability.

A **Data logger function** is included to monetarized the measure and give a graphic line feedback.



Features a **back-wash probe function** and a **remote alarm feature**, using dedicated relays.

Data logging functions allow users and management to accurately **track the performance** of their systems in use.

Kontrol 100

Single-parameter controller

Advanced controllers designed for high-end applications. All models are equipped with analogue and digital outputs that can be programmed by the end user via software providing the user has a great autonomy in programming.

Kontrol 100 instruments assist the installer in managing and replacing the measuring electrodes, using the **"electrode quality" function**.

To facilitate further **legibility during programming and data reading**, the **reverse display function** allows the user to reverse the writing on the screen to obtain a high contrast.



The **multi-colour backlit function, with four different colors**, makes it easy to interpret what function the controller is in even in poor light conditions.

Kontrol 100 features a **Modbus RTU/ASCII protocol** that allows remote control interface using a **RS485 port**, making using the system for **larger multi-site complexes** easier and more efficient.

Kontrol 50

Single-parameter controller

Kontrol 50 are controllers designed for applications covering multiple parameters. All models are equipped with analogue and digital outputs that can be set by the end user via software.

The controller is equipped with programmes that **assist the installer** in the management and replacement of the measurement electrodes, using the **"electrode quality" control function**.

The **easy-to-use set up menu** makes verification of the dosing and control system simple and quick while high quality probes gives **high precision measurements**.



Reading data from the Kontrol 50 is easy thanks to its **real-time status bar** and the clear measurement screen in the centre of the digital display.

As with all Kontrol systems, it benefits from a **wizard calibration system** to facilitate daily maintenance tasks and a multilingual menu to ensure end users ability to use and interpret the system

Kontrol 42

Dual-parameter controller

Kontrol 42 instruments are double parameter function controllers designed for simple water treatment applications. These very user-friendly systems combine advanced performance with robust design.

A technologically advanced controller that enables precise adjustments, **its easy-to-use programming menu** makes verification of the dosing and control system simple and quick while the quality of the probes used **ensure high resolution measurements.**



Reading the data from the Kontrol 42 is made easy thanks to **its real time status bar and from the clear measurement display** in the centre of the digital display.

As with all Kontrol systems, it benefits from a **multilingual menu** to ensure end users ability to use and interpret the system.

Kontrol 40

Single-parameter controller

Kontrol 40 is a single parameter controller that uses the latest technology to accurately and reliably monitor pH, Redox (ORP), flow, potentiostatic chlorine and conductivity in all principal water treatment applications.

The innovative electronic control board used in Kontrol 40, allows full exploitation of its capabilities resulting in improved **accuracy and consistent repeatability of measurement.**

Its easy-to-use programming menu makes verification of the dosing and control system simple and quick while the quality of the probes used **ensure high resolution measurements.**



Reading the data from the Kontrol 40 is made easy thanks to **its real time status bar and from the clear measurement display** in the centre of the digital display.

As with all Kontrol systems, it benefits from a **multilingual menu** to ensure end users ability to use and interpret the system.

Sensor and Probes

pH, ORP, Electrical and Inductive Conductivity, Chlorine and disinfectants, Dissolved Oxygen, Turbidity and Flow

Monitoring a limit value or building a closed control circuit is easy with our sensors – in an enormous range of measuring applications. The measured values are delivered in real time and can be flexibly connected to the various process interfaces via bypass, immersion or installed fittings

Our product line provides a wide range of sensors for different measuring tasks. The field of application covers everything from simpler water treatment tasks to industrial process waters with more stringent requirements in terms of temperature, pressure, contamination tolerance and chemical resistance.



pH measurement is based on the use of a pH sensitive glass electrode, a reference electrode and a temperature element to develop a potential proportional to the pH of the solution.

The reference electrode is designed to maintain a constant potential at any given temperature, and serves to complete the pH measuring circuit within the solution.

- For every application up to 130 °C and 16 bar
- Virtually maintenance-free
- Highly accurate with pressurizable liquid electrolyte
- Open hole, pellon or ceramic diaphragms



ORP is a potentiometric measurement of the oxidizing/reducing power of a liquid. An ORP measuring electrode is similar to a pH measuring electrode, except it is normally constructed of a noble metal (Platinum or Gold).

From a water treatment perspective, ORP measurements are used often to control disinfection with chlorine and chlorine dioxide.

- For every application up to 130 °C and 16 bar
- Virtually maintenance-free
- Highly accurate with pressurizable liquid electrolyte
- Open hole, pellon or ceramic diaphragms

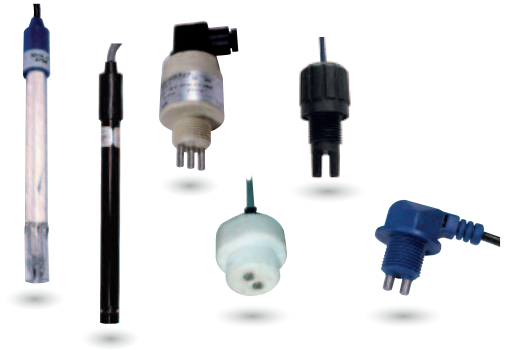


EC

The **conductive** principle sees an alternating current applied between sensor poles and the resulting current, dependent on the concentration of ions and on the length and area of the solution through which the current flows, is measured.

The current path is defined by the sensor geometry, or cell constant, which has units of 1/cm (length/area).

- From ultrapure water to high concentrated process media
- Cost-efficient for water / wastewater applications
- Conductive sensors for maintenance free applications

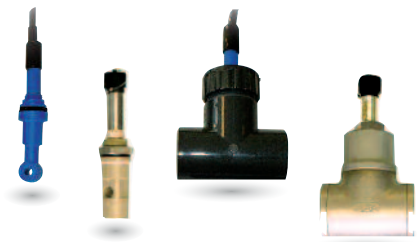


IC

The **inductive** principle sees the field coil of the sensor stimulated by a sinusoidal voltage. The current field in the fluid, that depends on its conductivity, generates a voltage in the receiver coil of the sensor.

The measure of this voltage and the cell constant give the right value of conductivity of the fluid.

- From ultrapure water to high concentrated process media
- Cost-efficient for water / wastewater applications
- Inductive sensors for maintenance free applications



DO

Dissolved Oxygen measuring sensor comes with an integrated temperature probe. The measuring technique is based on the following optical principle: a diode emits a blue light towards a support on which a fluorescent substrate is applied.

The substrate reacts by emitting initially a red light (luminescence), then returns to its initial state. The intensity of the produced red light and the return rate to the initial state are related to the present dissolved oxygen concentration.

- Innovative method gives accurate measurements over time, eliminating system calibration
- Maintenance required only every 2 years
- Suitable for variety of applications including where measuring liquid is almost stationary





The **paddle wheel sensor** consists of a freely rotating wheel with magnets which is perpendicular to the flow. As the magnets in the blades spin past the Hall sensor, a frequency and voltage signal which is proportional to the flow rate is generated.

According to Faraday's Law the voltage induced by the magmeter is proportional to the velocity of the conductor fluid. In the **SFWE magmeter** the physical principle at work is electromagnetic induction.

- Low cost solution with high flow system accuracy
- No pressure drop making it ideal for gravity flows
- Reduced dependence on flow, substances and film-forming media
- Magmeter without moving parts for measurement of conductive and homogeneous dirty media



The standard **potentiostatic and amperometric probe** design consists of two electrodes (anode and cathode) that measure a change in current caused by the chemical reduction of hypochlorous acid at the cathode. The current that flows because of this reduction is proportional to the chlorine concentration.

The sensor contains a platinum and a copper electrode. With the sample water acting as the electrolyte, galvanic potential develops between the two electrodes. With stable conditions of pH and water flow, the sensor current increases proportionally to the free chlorine content.

- Different membranes available to measure range of chlorine ions
- Only 30 seconds to achieve an accurate reading
- Reduced dependence on flow, substances and film-forming media
- Wide range of measure up to 200 ppm
- Complete collection range of parameter measure as: Chlorine, Peracetic acid, Ozone, Bromine, Peroxide



Turbidity and Suspend Solid is the cloudiness of a fluid caused by large numbers of individual particles. SEKO's probes are used to determine high and very high concentrations of suspended solids up to 150 g/l. They offer reliable measurement thanks to an infrared optical measurement at 880 nm.

Their dual pulsed light beam system compensates for drift from any optical components, while digitized signals inside the probe body reduce the possibility of electrical interference in the signal transmission.

- Measurement is performed by using a 90° scattered light method compliant with ISO 7027 / EN 27027
- Medium is in direct contact with the sensors to make the unit virtually independent from humidity and condensate water
- No need to replace silica gel for easier and cheaper maintenance



Accessories

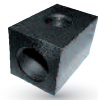
Probeholders, power supply, temperature sensor, cables, buffer solutions and probe accessories



Probes holder



Pressurized probes holder



Outflow probes holder



By-Pass probes holder



Immersion probe holder



Power Supply



Temperature sensor



Probe cable



Certified buffer solutions



Signal amplifiers for pH and ORP probes only



Metering, measuring and control systems

At the core of any operation where water quality is key, the ability to measure and control the quality quickly, accurately and with a reassurance constancy is paramount.

SEKO's measuring systems are built with precision in mind and that can function in both internal and external environments, specifically conceived to fit individual applications. Available in different performance classes they can be integrated into every process environment.

Metering, measuring and control systems

Panel-mounted and cabinet

When choosing to install a new piece of measuring equipment in your operation, the ability to simply “plug and play” is a key benefit, saving time and money and potential risks of selecting the incorrect or incompatible individual components. SEKO, renowned for its attention to offering practical and pragmatic designs, offers a range of preassembled panels that deliver outstanding results for most commonly found water treatment applications.

- SEKO's Kontrol Range delivers a modular technical solution for the Water Treatment & Industrial Process markets.
- The multi-parameter controllers are suitable for use in the following applications Municipal Water Treatment, Drinking Water, Cooling Towers, Swimming Pools, Waste Water Treatment.



The range also features a

- **Measuring and control panels** that offer an easy access “plug and play” solutions that make servicing and alterations simple. Available in the following models: Kontrol 800 Panel, Kontrol 800 CT Panel, ECS 500 Panel, Kontrol 500 Panel, Kontrol 40 Panel
- **Kontrol Guard Tech measuring and control cabinet** is a tamper proof enclosure containing instrumentation and manifold for measurement and control

Kontrol 800 Panel

Panel-mounted multi-parameter

The SEKO range of bespoke cooling tower panels are designed to provide a simple and effective way of automating the control of chemicals in cooling tower applications.

These systems comply with the requirements for dosing to control **microbiological growth**, **prevent corrosion** and bleed off the tower as required.

A selection of pump options provides maximum flexibility to cater for all **Cooling Tower chemical options**.



These **plug and play systems** save valuable installation time and together with **user friendly set up menu and easy maintenance**, the SEKO Cooling Tower systems provide an ideal solution to dosing control.

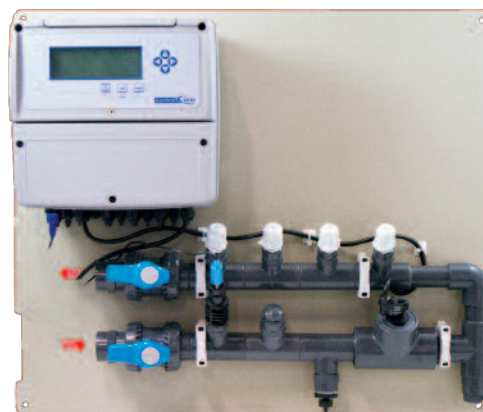
Kontrol 800 CT Panel

Panel-mounted multi-parameter

The Kontrol panel 800 comprises 2 key elements and is designed with SEKO's usual attention to ease of use and simple to perform set up and maintenance regime that requires little technical knowledge.

The Kontrol 800 controller is a **dedicated multi-parameter controller** for complex applications that checks multiple chemical parameters simultaneously.

It comes with an **alphanumeric display (4 lines x 20 characters)**, multi-language menus for easy operator interface and provides for remote control interface via a **serial port RS485 by Modbus RTU/ASCII protocol**.



Its universal power supply 100 – 240 Vac 50/60 Hz 20W delivers high technical performance and the **galvanized electrical and measuring insulation** ensures reliability.

The second is a **piping hydraulic PSS-Tube probe holder with Volumetric Flow-meter**, featuring a range from **300 to 3000 litres/hour**, with an external reed sensor for proper flow rate.

ECS 500 Panel

Panel-mounted multi-parameter

The ECS 500 panel helps to prevent legionella-related risks. The panel analyzes the water in a circuit, measures the concentration of free chlorine, and its regulation in a closed circuit

It is a **plug and play panel**, ready to use as soon as its installed and comes with several possible combinations for **flexible solutions** according to your needs.

Multiparameter instrument with **data recording** and direct reading of the measured parameters, with a **potentiostatic probe**.



Version dedicated to the **measurement of chlorine** with a potentiostatic probe.

Version dedicated to the measurement of **chlorine**, with a probe and ORP sensor.

Kontrol Guard Tech

Cabinet multi-parameter

The new Kontrol Guard Tech unit, with its 5" digital graphic display, combines the traditional elements of control and dispensing with a totally digital control system, which facilitates the setting and monitoring of the various parameters, depending on the application, using and comparing historic values to identify or analyze any errors.

The Kontrol 800 Tech controller is a **dedicated multi-parameter controller** for complex applications that checks multiple chemical parameters simultaneously.

It comes with an **graphic display 5" (240x128 pixel)**, multi-language menus for easy operator interface. With the **high-contrast image** of the graphic display and the **easy-to-read**, explicit icons that are used, the operator is guided step-by-step through the applications. To improve the readability of the screen, the controller has several screen settings.



It provides for remote control interface via a **serial port RS485** by Modbus RTU/ASCII protocol.

Its universal power supply 100 – 240 Vac 50/60 Hz 20W delivers high technical performance and the **galvanized electrical and measuring insulation** ensures reliability.

New box design for increased controller protection.



Multi-parameter photometric system

SEKO's products offer very high precision and reproducible analysis results with minimum time and effort.

SEKO's multi-parameter control unit provides for real time determination of Free Chlorine (Photometric System), pH, Redox and Temperature. The system is equipped with a graphic display subdivided into areas for simultaneous display of all available measurements.

Photometer System

Multi-parameter analyser

Over the last decades, Photometry has developed as an essential method of analysis because it enables the “quantitative” determination of both organic and inorganic compounds. The technique uses the colorimetric methods characteristic of certain analytes, i.e. the properties of certain chemical reagents to develop colour with an intensity proportional to the concentration of a given substance, at a particular wavelength of the spectrum visible between the UV and IR.

Compared to UV or IR spectrophotometry, the colorimetric technique has the extraordinary advantage of relying on well-defined linear reactions and with few well-known interfering substances. The Palin method employs the interactive DPD principle to determine the concentration of certain oxidants such as: Free Chlorine, Total Chlorine, Chlorine Dioxide, Ozone, Peracetic Acid, Bromine, Permanganate etc. The DPD reacts with the oxidant present in the water, producing almost instantly a pink colour, making sure that all those factors that may affect measurement (pH, μS , $^{\circ}\text{C}$, organic matter etc.) have no influence on the analytical methodology

- The range enables the operator to monitor key values to suit almost any application covering the following parameters: pH, ORP, Free and Total Chlorine; Combined Chlorine by software



SEKO's products offer very high precision and reproducible analysis results with minimum time and effort. Its multi-parameter control unit provides for real time **determination of Free chlorine (Photometric System), pH, Redox and Temperature.**

The system is equipped with a **graphic display** subdivided into areas for **simultaneous display of all available measurements.**

The range also features

- Multi parameter with high accuracy measure and integrated data logger
- Comes with RS485 port with ModBus RTU protocol for full compatibility remote data logging interface
- Chlorine Photometric chamber

Pre-assembled panel-mounted

The pre-assembled panels of SEKO's range offer advanced solutions for residential swimming pools. A flexible system for quick installation, that combines a pre-selected number of products assembled on a small panel, including a by-pass probe holder, electrical box and controller unit.

- Advanced parameter setting
- Proportional dosing TWM (Time With Modulation) or FWM (Frequency With Modulation)
- Calibration process uses high quality pH and ORP probes
- Extra dosing available thanks to pH and chlorine relay
- Installation kit included
- Amperometric sensor measures chlorine PPM
- No technical skill required
- Remote alarm relay
- Circulation pump checks power on "Flow Trigger"
- Input level probe checks product levels
- Multi language menu
- Circulation and boiler controller

INSTALLATION KIT INCLUDED

pH and ORP probes
 pH and ORP buffer solutions
 Ceramic foot filter and FPM non return valve
 4x6 and 8x12 PVC and PE tubes



Easy Panel

A simple pre-assembled panel with an automatic proportional dosing system for simple chemical parameter regulation for indoor and outdoor pools.

EASY PANEL

- for pH (0 – 14) and ORP (0 – 1000 mV)
- for pH (0 – 14) and ORP (0 – 1000 mV) and Free chlorine (0 – 5 ppm with amperometric probe)

HYDRAULIC PROBE HOLDER

2 PSS7 (single probe)
 2 Washable cartridge filters (80 µm)

MAIN BOARD

Power supply 100 – 240 Vac 50/60Hz
 Cable Box with power supply 230Vac to connect external dosing pump
 Relay 250 V 10 A (Resistive Load) each measure



IP65 PRE-ASSEMBLED PANEL-MOUNTED

Dimensions 630 x 420 x 10 mm

Material PP

Easy Basic

An entry level pre-assembled panel with an automatic proportional dosing system for simple chemical parameter regulation for above ground pools.

EASY BASIC

- for pH (0 – 14)
- for ORP (0 – 1000 mV)

HYDRAULIC PROBE HOLDER

2 PSS7 (single probe)
2 Washable cartridge filters (80 µm)

PROPORTIONAL DOSING PUMPS

Flow rate 1.5 or 5 l/h; Pressure 1.5 bar
Santoprene tubing

POOL SIZE Indoor 1 – 130 m³; Outdoor 1 – 110 m³



MAIN BOARD

Alphanumeric display 16 letters x 2 lines
Power supply 220 Vac 50/60Hz

IP65 PRE-ASSEMBLED PANEL-MOUNTED

Dimensions 630 x 420 x 10 mm
Material PP

Easy Invikta

A simple pre-assembled panel with an automatic proportional dosing system for simple chemical parameter regulation for indoor and outdoor pools.

EASY INVIKTA

- for pH (0 – 14)
- for ORP (0 – 1000 mV)

HYDRAULIC PROBE HOLDER

2 PSS7 (single probe)
2 Washable cartridge filters (80 µm)

SOLENOID DRIVEN DOSING PUMPS

Proportional dosing FWM
(Frequency With Modulation)
Flow rate 5 l/h ; Pressure 5 bar
Wetted parts Body in PVC, membrane in PTFE

POOL SIZE Indoor 50 – 350 m³; Outdoor 50 – 300 m³



MAIN BOARD

Alphanumeric display 16 letters x 2 lines
Power supply 100 – 240 Vac 50/60Hz

IP65 PRE-ASSEMBLED PANEL-MOUNTED

Dimensions 630 x 420 x 10 mm
Material PP

A close-up photograph of water flowing out of a blue pipe. The water is clear and turbulent, with many small bubbles and ripples. The background is a soft, out-of-focus green, suggesting an outdoor setting. The pipe is on the left side of the frame, and the water flows towards the right.

Flow meters

Electromagnetic flow meters are used to measure the flow rate of conductive fluids and waste water.

The measurement is independent of the density, viscosity, temperature and pressure of the fluid. The conductivity of the fluid must be greater than $5\mu\text{S}/\text{cm}$. The measuring tube must not be crossed by fluids carrying solid bodies of high dimension that cannot be considered suspended solids. Load losses are absent and straight stretches reduced upstream and downstream of the instrument are necessary.

The converter has been designed with the purpose of meeting all the requirements of modern water management systems. It supports extended functions which make it perfectly suitable for measuring and billing in civil, industrial and agricultural sector and for flow measurement in residual water treatment.

SMAG 103

Flow Meters

Electromagnetic flow meters are used to measure the flow rate of conductive fluids and waste water. The measurement is independent of the density, viscosity, temperature and pressure of the fluid. The conductivity of the fluid must be greater than $5\mu\text{S}/\text{cm}$.

- Size : DN15 – DN2000 (Flange UNI 2223) / DN25 – DN100 (Triclamp or DIN11851) / DN3 – DN20 (Thread Gas or NPT)
- Pressure : PN10 – PN64 / PN10 – PN40 / PN16
- Body Material : Carbon Steel ; SS 304 / Electrodes Material : Hastelloy C ; SS 316 L



Principle applications include:

- Sludge and water treatment
- Control of civil and industrial wastes
- Measurement of industrial process water
- Control of the chemical dosage
- Energy industry: generation and distribution
- Extraction industries: quarries, mines

SMAG 103 Converter controller

The converter has been designed to meet **all the requirements of modern water management systems**. It supports extended functions which make it perfectly **suitable for measuring and billing** in civil, industrial and agricultural sector and for flow measurement in residual water treatment.



Your Choice, Our Commitment

People choose to do business with SEKO for one or more reasons, but ultimately it is their choice, and therefore they merit our commitment. "Our commitment" is total and not only to our customers, but also to each other and the Company's to its employees.

Vision

**TO BE YOUR PARTNER OF CHOICE FOR
DOSING SOLUTIONS, GLOBALLY**

SEKO, is a passionate, dedicated Global Family of Professionals. We listen to each of our Partners and are committed to deliver the right solution in the Hygiene, Water Treatment and Industrial Process markets.

Values

**MUTUAL RESPECT, QUALITY AND
SPIRIT OF COLLABORATION**

MUTUAL RESPECT

Mutual Respect because doing business is about being able to generate trust between Customer and Supplier. We'll deliver against our commitments, on time and in a transparent fashion, so you know can plan for your own business needs.

QUALITY

Quality for SEKO is a 360° reality. It covers not only the design, development, production and delivery of our products and solutions but it runs through the core professionalism of our teams.

SPIRIT OF COLLABORATION

Spirit of Collaboration is fundamental to our success and SEKO prides itself on how we work as a worldwide team, blending multiple country teams and functions to bring solutions to a Customer request or market need from an idea to the real world in very short time, across our global presence and beyond.



Your Choice, Our Commitment

In the modern Globalised world, being a privately owned Company has significant benefits especially for our Customers, our Partners. For over 40 years, SEKO has developed a Global organisation able to take the longer view, manage the pressure of the now, and to plan for the long term, delivering true Partnership for our Customers, with transparency and mutual respect for each other.

Whether it's for our reknown flexibility, our attention to detail, the high-quality products, or just the way we do business, we understand that it's Your Choice to do business with us. It is Our Commitment to fulfill your needs wherever you, our Customers are.



For more information about our portfolio, worldwide locations, approvals, certifications, and local representatives, please visit www.seko.com

As part of a process of on-going product development, SEKO reserves the right to amend and change specifications without prior notice. Published data may be subject to change.

© SEKO, Layout and origin: Italy, 850001-MEAS_light_en_int, 11.2017

The SEKO logo, consisting of the word "seko" in a bold, lowercase, blue sans-serif font. The background of the entire page features a collage of images: a blue industrial tank on the left, a large white cooling tower in the center, and laboratory glassware on the right.