

# Krypton® Neon Pool

## Pool & Spa Controller

The Kuntze Neon Pool Controller provides the user with clear, concise, control of swimming pool water. It provides accurate and reliable measurement of disinfectants including:

- Chlorine
- Bromine
- Ozone



Kuntze have over 70 years of experience and knowledge of manufacturing instrumentation and sensors. Since founding the company in 1945 our head office has been located near Dusseldorf in Germany and today our purpose built facility is home to production, technical support and also our R&D team.

Our Krypton® systems are designed to satisfy the needs of pool plant operators everywhere. It is able to measure and control the disinfection and pH in a pool or spa 24 hours a day, seven days a week.

The Krypton® Pool includes the option to measure water temperature and also optional parameters such as ORP and a fifth additional measuring input which can be used for Free Chlorine, Total Chlorine or Conductivity.

## Potentiostatic Open Sensor Measurement

Potentiostatic measurement has long been recognised as the first choice method of measuring disinfectants. Kuntze Instruments have refined the measurement with the use of gold measuring and counter electrodes



on their open sensors. With the Zirkon® Double Gold sensors our controllers are able to selectively measure the disinfectant you choose from the Neon's menu.

The Kuntze Zirkon® Double Gold sensors do not require electrolyte replenishment or the replacement of membranes to maintain the calibration.

The Zirkon® Disinfectant Sensors are low maintenance and reliable with a long operational life. They can be used in pressurised systems and measurement accuracy is increased when used with the Kuntze® Automatic Cleaning System.

## ASR® Automatic Sensor Cleaning

ASR® is our patented Automatic Sensor Cleaning system and is incorporated within the software of our instruments.

ASR® is the most effective way to clean the electrode surfaces of the disinfection sensor and maintain the integrity of the measurement.

The process is fully automated and the software can be set to clean once a day to once a week. The cleaning program can be set whilst the pool is not in use during the night.



The ASR<sup>®</sup> cleaning process does not use harmful chemicals but only uses the pool water to clean itself.

ASR<sup>®</sup> is quick and effective; the process takes approximately 30 seconds to complete the clean and 3 minutes to re-polarize and start measuring and controlling the pool again.

ASR<sup>®</sup> works by applying a small electrical charge across the water in the flow cell and turning the water back to hydrogen and oxygen. These components of water aggressively seek to combine with any contamination near or around the electrode. Any leftover hydrogen or oxygen simply re-combines and forms water again. There is no chemical or other hazard in the cleaning process.

ASR<sup>®</sup> provides significant benefits to the pool plant operator including:

- Reliable measurement of the disinfectant
- Minimise the need to calibrate disinfection
- Reduced manual cleaning of the sensor
- Effective removal of fats, greases and other contaminants found in swimming pools.

Check out the following link to see our demonstration video of the cleaning process:



## StabiFlow<sup>®</sup>

The Kuntze StabiFlow<sup>®</sup> is a simple mechanical device to control the flow of water past the sensors for precise measurement of the disinfectant product.

As long as the flow of water remains above 35 litres per hour the measurement is unaffected by fluctuations in flow. The StabiFlow<sup>®</sup> maintains a constant flow



of approximately 30 litres per hour past the sensor.

This is particularly of benefit when the controller is fitted with circulation pumps controlled by inverters for energy saving.

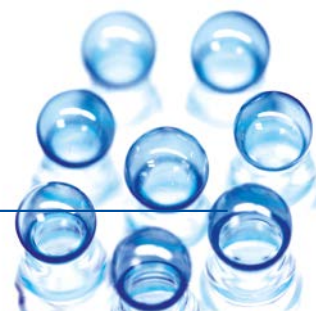
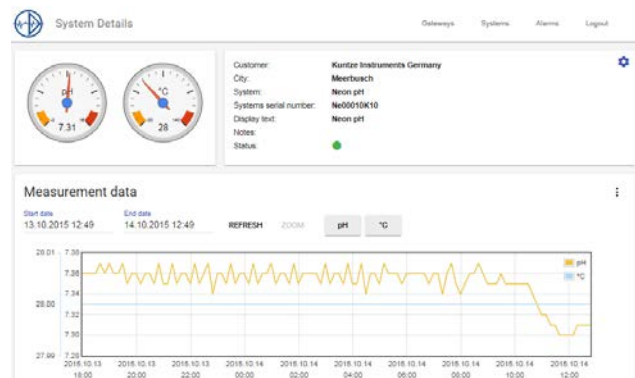
The StabiFlow also increases the life expectancy of the sensors in our flow cells reducing the cost of ownership for the user

## Cloud Connect<sup>®</sup>

Controlled water measurement at any time, from any place and even on mobile devices is important to all processes. The solution is Kuntze Cloud Connect<sup>®</sup> service.



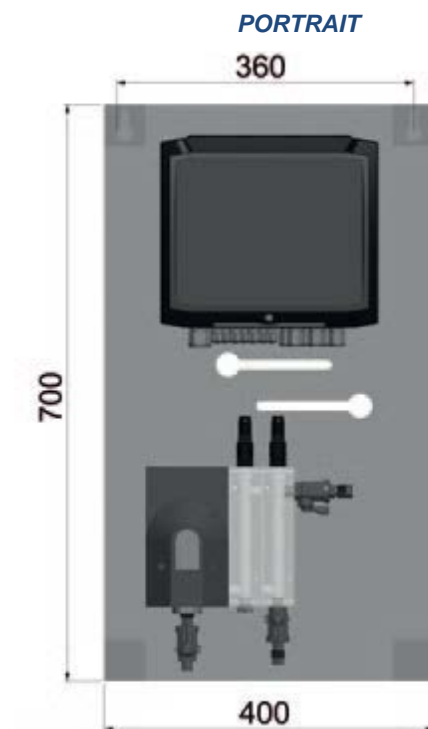
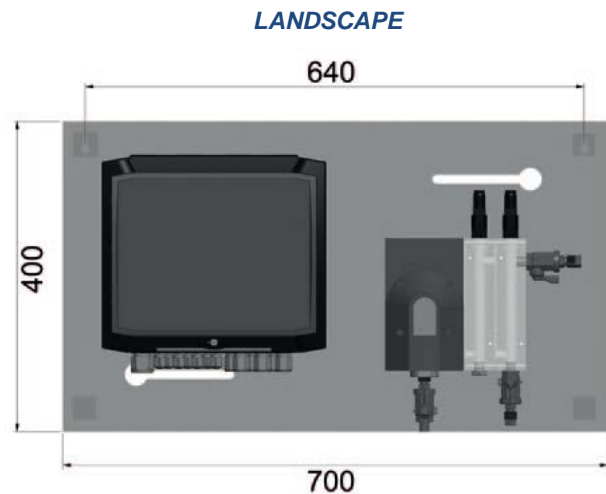
The Kuntze Cloud Connect provides a dashboard to view all the key performance indicators from the Neon Pool. It will monitor and alert you to any problems with your pool.



## Key Features

- Potentiostatic Measurement
- Gold Electrodes on Disinfection Sensor
- Flow Control Across Sensors
- Automatic Sensor Cleaning ASR®
- User Friendly Touch Screen Menu
- Backlit LCD Display
  - Choice of Dashboard Displays
- Selectable Disinfection Ranges
- SD Card Load & Save Feature
- Three Dosing Modes
  - Standard Operation
  - Eco Mode
  - Custom Operation
- Pump Controller Options
  - On / Off With Adjustable Hysteresis
  - Pulse-Pause, Pulse Frequency or Continuous with P/PI/PID Control
  - 3 Point Controller with & without Position Feedback
- 8 Relay Outputs
- pH & Temperature Compensation
- IP65 Enclosure
- Operator Access Level Codes
- Event Log – Stores 100 Events

## Specifications



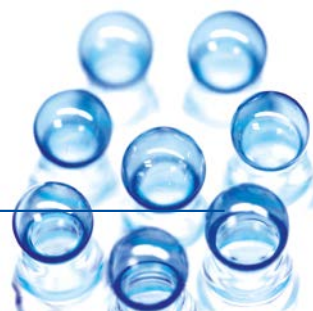
## Order Codes

### Controllers

CODE	DESCRIPTION
701 500 01GB	Neon Pool, StabiFlow (Landscape)
701 500 02GB	Neon Pool, StabiFlow (Portrait)

### Sensors

CODE	DESCRIPTION
241 351 14GB	Double Gold Disinfection Sensor
241 327 00GB	Zirkon pH Sensor; KCL



**Parameter & Ranges**

- Free chlorine: 0.. 5.00 / 10.00 / 20.00 mg/l
- Bromine: 0.. 5.00 / 10.00 / 20.00 mg/l
- Chlorine Dioxide: 0.. 5.00 / 10.00 / 20.00 mg/l
- Ozone: 0.. 5.00 / 10.00 mg/l
- Hydrogen peroxide 0.. 30.00 mg/l
- pH 0 - 14.00 pH
- Temperature 0.. 50.0 °C / 32.0.. 122 °F
- ORP (optional) -1500.. +1500 mV

**Optional 5<sup>th</sup> measuring input for:**

- Total Chlorine: 0.. 10.00 mg/l
- or
- Conductivity: 0 - 100,0 mS/cm

**Digital inputs**

- Low Water or No Flow
- External Controller Stop
- pH Solution Level control
- Disinfection Level Control
- Eco Mode activation control parameter set

The Kuntze Krypton® Pool system is delivered assembled on a back board and is simple to install. The controller is supplied with sensors, cables, fixings and accessories for quick, simple installation & commissioning.

**Authorised Kuntze Partner**

The following partner is authorised to install and commission Kuntze Instruments Controllers:

