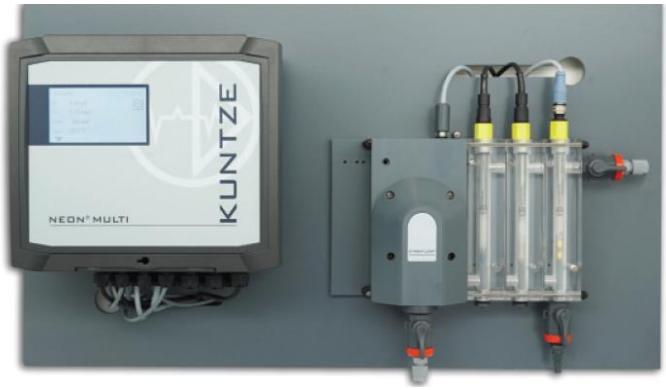
Krypton® Multi

Measuring disinfectants, pH, temperature, optional ORP, conductivity or a 2nd DIS input

Multi channel water monitoring system

The Krypton® Multi offers precise results in industrial disinfectant applications, e.g. in drinking water plants or food production, thanks to its multi-channel monitoring. The all-in-one system consists of a measuring device, multiple sensors running simultaneously, a flow fitting, software, and cables. In its basic standard configuration, the Krypton® Multi is equipped with three measurements: Disinfection, pH, and temperature. Additionally, a second disinfection, a redox and a conductivity measurement can be added. There are six digital inputs for external events. Eight potential-free output relays can be used either as control or alarm relays. The system features a PID controller and 3-point control functions available with or without feedback. Our modular Argon Stabiflow® fitting is integrated and provides a constant water flow of approx. 30 liters per hour, is brine resistant and approved for pressure up to 6 bar at a temperature of 20 °C. The Krypton® Multi can be customized to meet your exact measurement and control requirements. With five analog outputs, our unique Automatic Sensor Cleaning (ASR®) as well as a Modbus RTU unit and a data logger are available as add-on modules. The measurement system can be digitally controlled and seamlessly integrated into an existing measurement infrastructure via our Cloud Connect® service. In addition, software updates and add-on modules can be activated at any time after purchase. All Kuntze products are Made in Germany.



Applications

Disinfection

Industrial Water

Pool & Spa

Drinking Water

Process Water

Cooling Water

Food & Beverage

Waste Water Treatment

Krypton® Multi

Technical data

Measuring range

Disinfection (DIS 1)	Free Chlorine, Chlorine Dioxide, Total Chlorine:	Up to 1000 µg/l, 5.00 / 10.00 / 20.00 mg/l
	Ozone:	Up to 1000 µg/l, 5.00 / 10.00 mg/l
	Hydrogen Peroxide:	Up to 30.00 mg/l
pH	0.. 14.00 pH	
Temperature	0.. 50 °C (32.. 122 °F)	
ORP (optional)	1500.. + 1500 mV	
5th measuring input (optional)	Conductivity:	Up to 2.000, 20.00, 200.0 mS/cm
5th measuring input (optional) (DIS 2)	Free Chlorine, Total Chlorine:	Up to 1000 µg/l, 5.00 / 10.00 / 20.00 mg/l

Input characteristics

Limit of Detection DIS	+/- 2 % from measuring range end (except Hydrogen Peroxide)	
Temperature measuring range	0..50 °C (32.. 122 °F)	
Temperature compensation	0.0.. 8.0 %/K, adjustable coefficient (DIS), nonlinear (pH)	
pH compensation	Nonlinear (DIS)	
Digital input	Flow control, external controller stop, 2 x level control, activation 2nd or 3rd control parameter set, leakage	
Process conditions chemistry	pH-range:	6.. 8 pH (Free Chlorine) 6.. 9 pH (Chlorine Dioxide, Ozone, Hydrogen Peroxide) 6.. 10 pH (Total Chlorine)
	Min. conductivity:	Depending on sensor
Process conditions assembly	Flow Input:	> 0.5 bar, >30 l/h
	Flow Output after Stabiflow®:	~ 30 l/h
	Temperature:	0.. 50 °C
	Pressure:	< 6 bar at 20 °C
Response time	< 20 s	

Output characteristics

Alarm relay	Up to 4 potential free CO, max. 250 V; 2 A, 550 VA	
Output signal	Optional: 5 x 0/4.. 20 mA (scalable, galvanically isolated)	
	Load:	Max. 500 Ohm
	Registration range:	Scalable within the measuring range
Storage media	SD card up to 1 GB:	Industry standard
Serial interface	Option:	RS 485 Modbus RTU
	Baud rate:	19200 kbs (Modbus)
	Data format:	8 bit

Power supply

Line voltage	85.. 265 V AC / DC, 50.. 60 Hz; Option: 24 V DC	
Power consumption	10 VA	

Process conditions

Temperature	Storage:	-20 °.. +65 °C (-4 °..149 °F) Exception sensor: 0..+30 °C (32 °..86 °F)
	Operation:	0 °.. +50 °C (32 °.. 122 °F)
Humidity	Max. 90 % rH at 40 °C (non-condensing)	
Ingress Protection	Wall mounted:	IP 65

Controller

Control parameter	Desinfection (CLO_2, CL_2, O_3, H_2O_2, TCL), pH and other parameter optional
Control response	On / off controller (adjustable hysteresis) P / PI / PID controller (pulse-pause, pulse-frequency or continous output) 3-point controller with or without position feedback
Relay	4 relays, each a potential-free CO contact, max. 250 V, 2A, 550 VA
Start delay	0.. 200 sec till controller activation
Digital input	See input characteristics
Control parameter set	2nd and optional 3rd parameter set for night operation etc.

Language

Default language	English, German
Other options	Russian, Danish, Dutch, French, Polish, Spanish

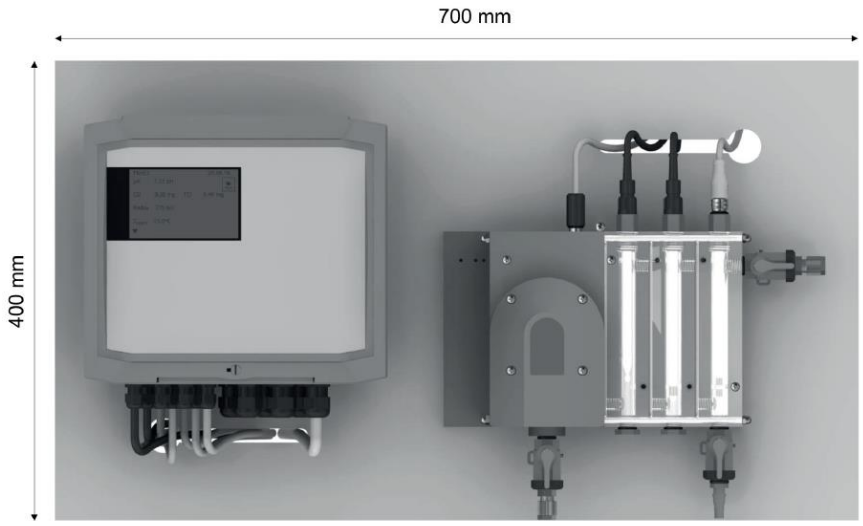
Certificates and approvals

CE-Symbol	The product meets the requirements of the harmonized European standards and complies with the legal requirements of the EC directives
EMC	EN 61000 6-1 (3) EN 61000 6-2 (4) EN 61326-1

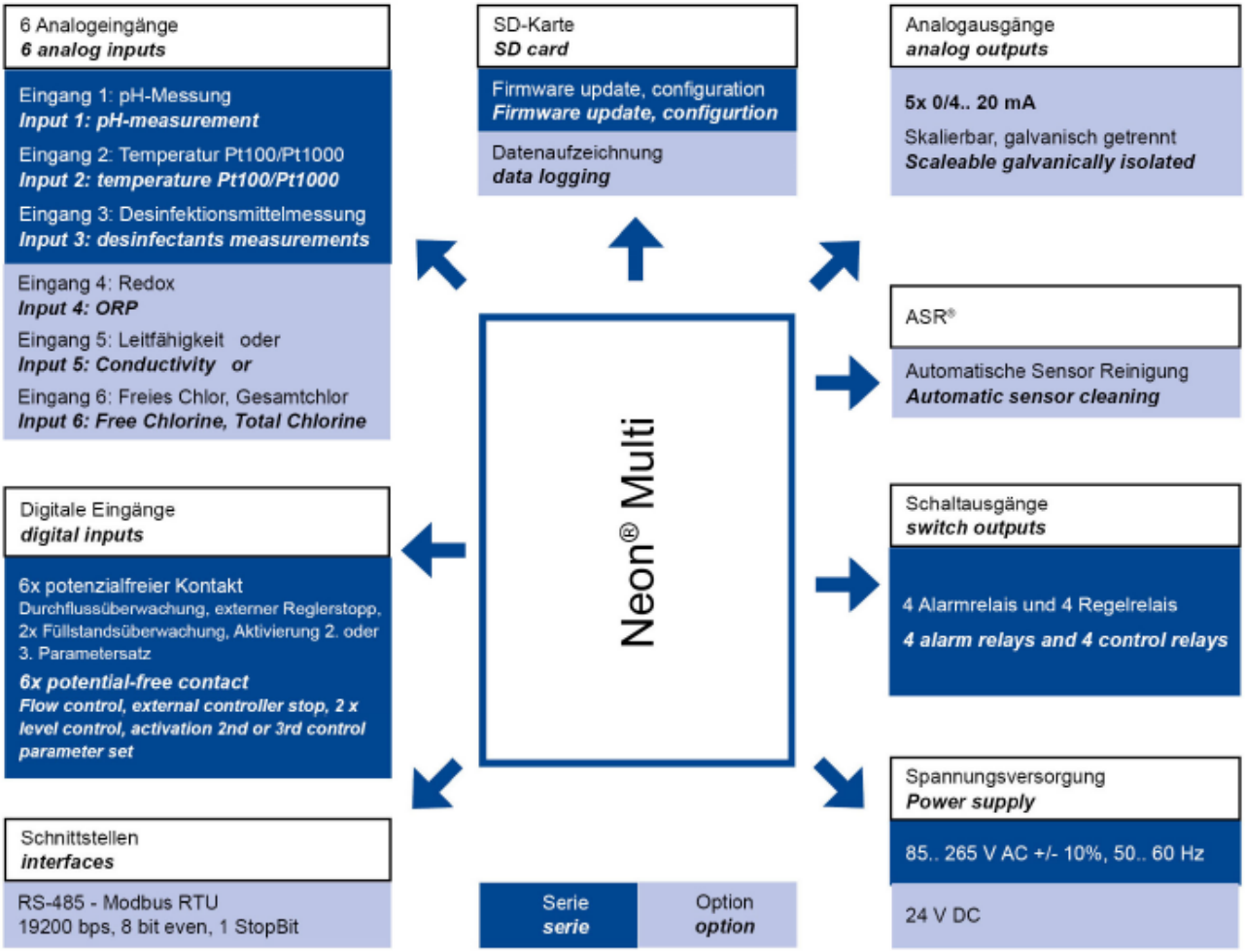
Design configuration

Material	Board:	PVC
	Assembly:	PVC
	Instrument (housing):	ABS
	Sensor:	Glass, Plastic / Gold / Platin
Dimensions	700 x 400 mm	
Weight	Approx. 1.9 kg	
Connection	Cable inlet:	6 x M16, 10 x M12
	Plug-in terminal:	Rigid / flexible 0.14 - 1.5 mm²
	Relays / power supply:	Rigid / flexible 0.2 - 1 / 0.2 - 1.5 mm²
	Distribution block:	Rigid / flexible 0.5 - 1.5 / 0.5 - 1.5 mm²
	Water hose connection:	DN 6/8

Mechanical drawing



Interface diagram



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