

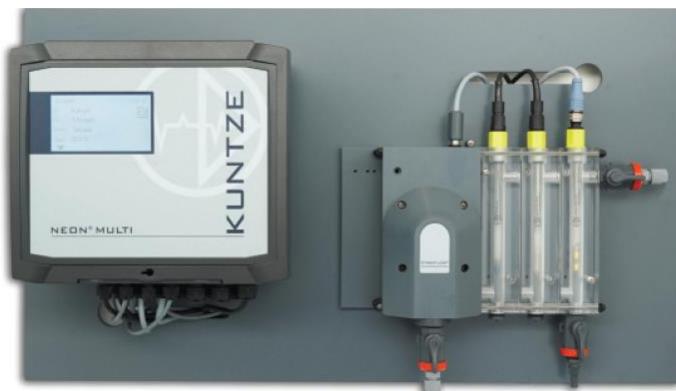


## Krypton® Multi

Measuring disinfectants, pH, temperature, optional ORP, conductivity or a 2<sup>nd</sup> 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 ORP 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: Ozone: Hydrogen Peroxide:	Up to 1000 µg/l, 5.00 / 10.00 / 20.00 mg/l Up to 1000 µg/l, 5.00 / 10.00 mg/l Up to 30.00 mg/l
pH	0.. 14.00 pH	
Temperature	0.. 50 °C (32.. 122 °F)	
ORP (optional)	-1500.. +1500 mV	
5 <sup>th</sup> measuring input (optional)	Conductivity:	Up to 2.000, 20.00, 200.0 mS/cm
5 <sup>th</sup> measuring input (optional) (DIS 2)	Free Chlorine, Total Chlorine:	Up to 1000 µg/l, 5.00 / 10.00 / 20.00 mg/l

### Input characteristics

Measurement accuracy	+/- 2 % from measuring range end (except H <sub>2</sub> O <sub>2</sub> : +/- 2 mg/l)
Temperature measuring range	0..50 °C (32.. 122 °F)
Temperature compensation	0.0.. 8.0 %/K, adjustable coefficient (DIS), nonlinear (pH)
pH compensation	Nonlinear (Cl <sub>2</sub> )
Digital input	Flow control, external controller stop, 2 x level control, activation 2nd or 3 <sup>rd</sup> control parameter set, leakage
Measurement conditions	pH-range: 6.. 8 pH (Cl <sub>2</sub> ) 6.. 9 pH (Cl <sub>2</sub> , O <sub>3</sub> , H <sub>2</sub> O <sub>2</sub> ), 6.. 10 pH (TCI) Min. conductivity: 150 µS/cm (at lower conductivity choose different sensor type)
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 ( $\text{CLO}_2$ , $\text{CL}_2$ , $\text{O}_3$ , $\text{H}_2\text{O}_2$ , TCL), pH and other parameter optional
Control response	On / off controller (adjustable hysteresis) P / PI / PID controller (pulse-pause, pulse-frequency or continous output)
Relay	3-point controller with or without position feedback
Start delay	4 relays, each a potential-free CO contact, max. 250 V, 2A, 550 VA
Digital input	0..200 sec till controller activation
Control parameter set	See input characteristics 2nd and optional 3rd parameter set for night operation etc.

## Language

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

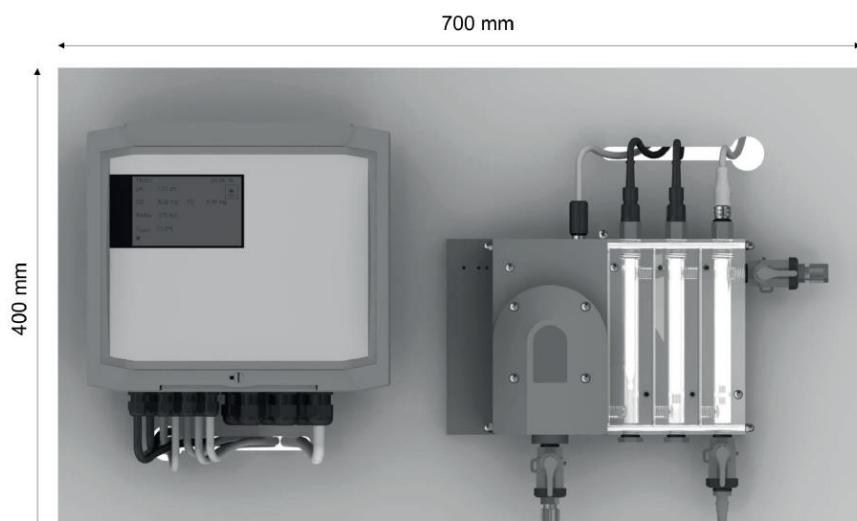
## Certificates and approvals

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

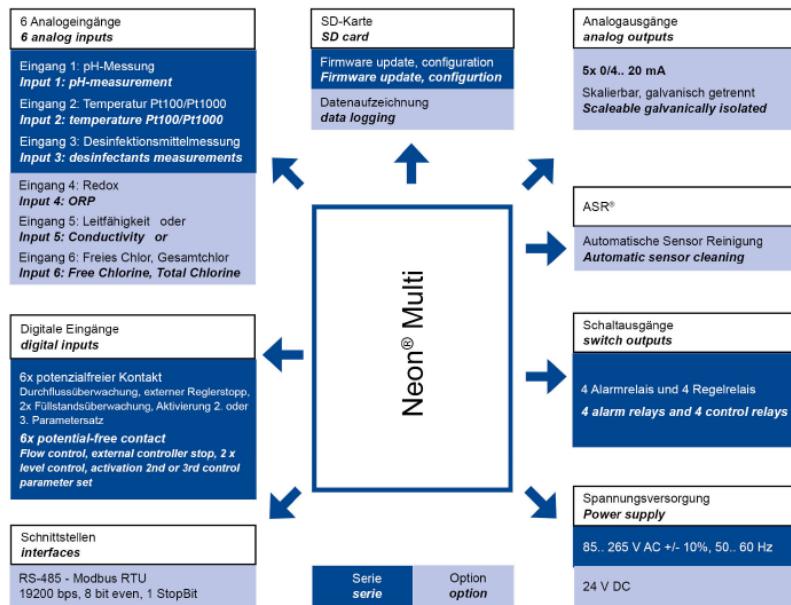
## Design configuration

Material	Board: Assembly: Instrument (housing): Sensor:	PVC PVC ABS Glass, POM / Gold / Platin
Dimensions	700 x 400 mm	
Weight	Approx. 1.9 kg	
Connection	Cable inlet: Plug-in terminal: Relays / power supply: Distribution block: Water hose connection:	6 x M16, 10 x M12 Rigid / flexible 0.14 - 1.5 mm <sup>2</sup> Rigid / flexible 0.2 - 1 / 0.2 - 1.5 mm <sup>2</sup> Rigid / flexible 0.5 - 1.5 / 0.5 - 1.5 mm <sup>2</sup> DN 6/8

## Mechanical drawing



# Interface diagram



## Article No. Description

70153000K	Krypton® Multi (Assembly: Argon StabiFlow®, measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, pH, temperature), 85.. 265 V AC
70153001K	Krypton® Multi, 24 V DC (Assembly: Argon StabiFlow®, measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, pH, temperature), 24 V DC
70153010K	Krypton® Multi, DIS/pH/ORP/Temp (Assembly: Argon StabiFlow®, measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, pH, temperature and ORP), 85.. 265 V AC
70153020K	Krypton® Multi, DIS/pH/EC/Temp (Assembly: Argon StabiFlow®, measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, pH, temperature and EC), 85.. 265 V AC
70153030K	Krypton® Multi, DIS/pH/TCI/Temp (Assembly: Argon StabiFlow®, measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, pH, temperature and TCI), 85.. 265 V AC
70153031K	Krypton® Multi, DIS/pH/TCI/Temp, 24 V (Assembly: Argon StabiFlow®, measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, pH, temperature and TCI), 24 V DC
70153200K	Krypton® Multi - pH/TCI (Assembly: Argon StabiFlow®, measuring board for TCI, pH, temperature), 85.. 265 V AC
70153201K	Krypton® Multi - pH/TCI, 24 V (Assembly: Argon StabiFlow®, measuring board for TCI, pH, temperature), 24 V DC



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