

Krypton® DIS

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Disinfectant measurement

Single channel water monitoring system

The Krypton® DIS provides reliable measurement results for free chlorine, chlorine dioxide, ozone or hydrogen peroxide and measures the water temperature. The single-channel measurement and control system consists of a measuring device, a sensor, flow fittings, software, and cables. In the standard version, the Krypton® DIS is equipped with a disinfectant and temperature measurement. In addition, there is a digital input and an alarm relay. Our modular Argon Stabiflow® fitting is integrated and provides a constant water flow of approx. 30 liters per hour, is salt and pressure resistant up to 6 bar at a temperature of 20 °C. All measuring parameters and the measuring range can be selected directly via the system's user interface.

The Krypton® DIS can be extended with additional analog outputs, concentration or volume based control functions, our Automatic Sensor Cleaning (ASR®) as well as a Modbus RTU unit, and a data logger. Full connectivity with an existing measurement infrastructure can be established 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/
Beverages



Waste Water
Treatment

Technical data

Measuring range

Free Chlorine, Chlorine Dioxide	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

Input characteristic

Temperature measuring range	-30,0.. +140,0 °C (-22,0°.. 284 °F)
Temperature compensation	0,0.. 8,0 %/K adjustable coefficient
Digital input	1 as controller stop by external contact, option: 2nd as controller stop or flow measurement for volume based dosing
Process conditions assembly	Flow input: > 0.5 bar (7.3 psi) Flow output after Stabiflow®: ~30 l/h (7.9 gph) Temperature: 0..50 °C Pressure: < 6 bar at 20 °C (87 psi at 68 °F)
Measurement accuracy	< 2 % from measuring range end (except Hydrogen Peroxide; H ₂ O ₂ : +/-2 mg/l)
Response time	< 20 s

Output characteristics

Alarm relay	1 potential-free N/O contact, max. 250 V, 6 A, 550 VA (invertible)
Output signal	Optional: 2 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 bps Data format: 8 bit

Power supply

Line voltage	85.. 265 V AC, +/-10 %, 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)
pH range	Operation: 0 .. +50 °C (32 °.. 122 °F) Free Chlorine: pH 6...8 Chlorine Dioxide, Ozon, Hydrogen Peroxid: pH 6...9
Humidity	Max. 90 % rH at 40°C (non-condensing)
Ingress protection	Wall mounted: IP 65

Controller

Control response	Option: on/off controller (adjustable hysteresis) P/PI/ PID controller (pulse-pause, pulse-frequency or continuous output) 3-point controller
Relay	2 relays, each with a potential-free N/O contact, max. 250 V, 6 A, 550 VA
Start delay	0.. 200 sec until controller activation
Controller stop	Digital input

Proportion to volume

Control mode	Option: volumed based by flow measurement
Flow measurement	Impuls measurement NPN (by digital input 2)
Flow measurement	Engine speed: 0.030.. 9.999 l/Imp
Relais 1	Potential-free N/O contact, max. 250 V, 6 A, 550 VA (pulse-pause, pulse-frequency)
Relay 2	Activating circulation pump

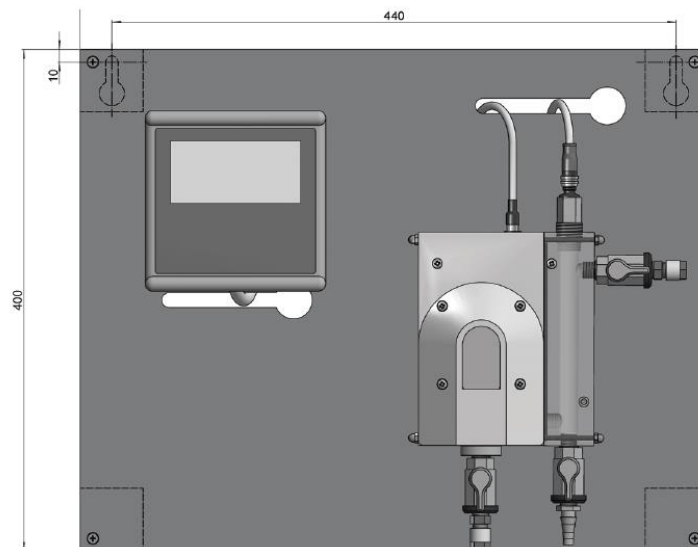
Certificates and approval

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

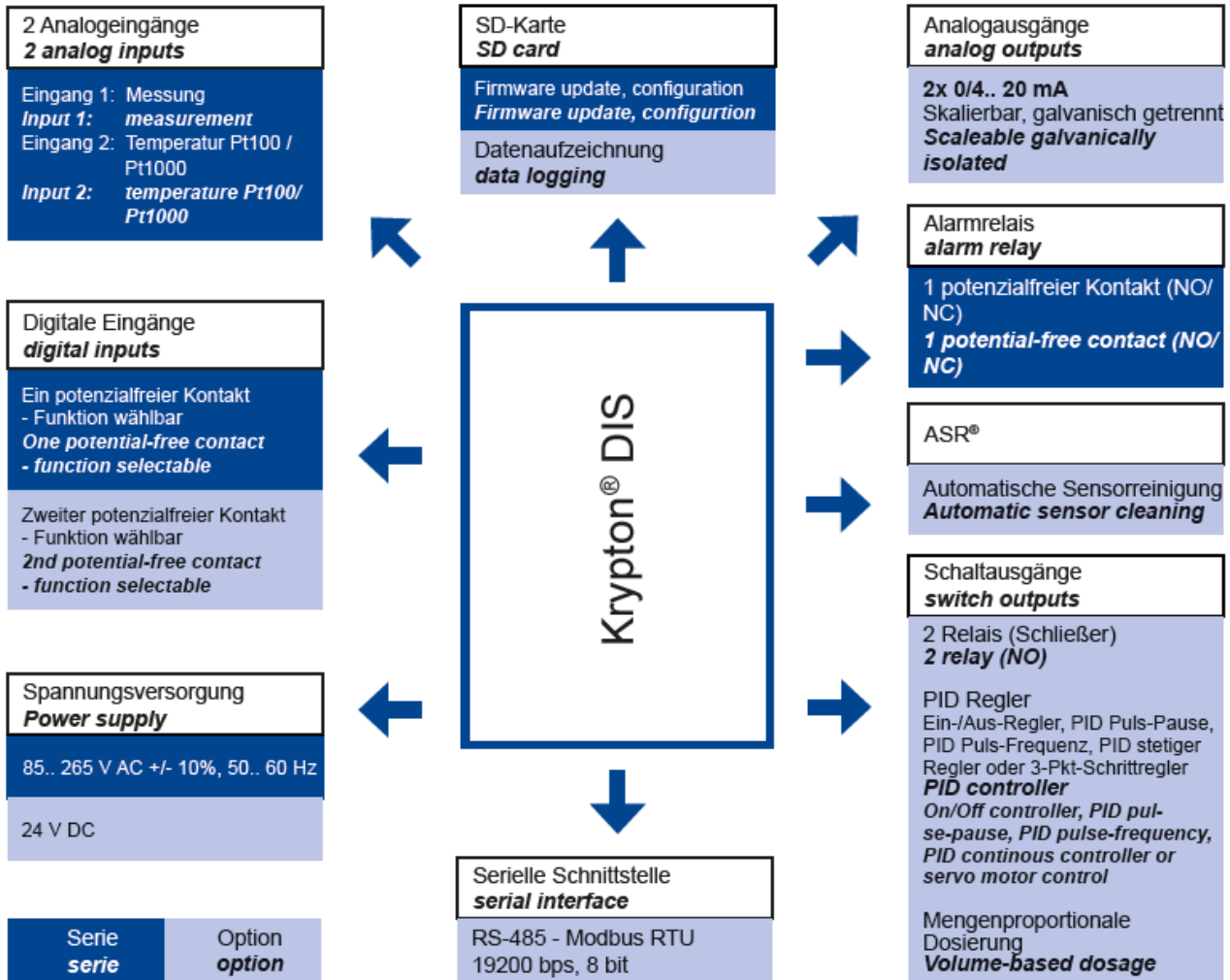
Design configuration

Material	Board: PVC	Assembly: PVC	Instrument: ABS	Sensor: Glass, POM / Gold / Platin / Hastelloy
Dimensions	400 x 500 mm			
Connection	Cable inlet: 1 x M16, 2 x M12	Plug-in terminal: Rigid / flexible 0.14 - 1.5 mm ²	Relays / power supply: Rigid / flexible 0.2 - 1 / 0.2 - 1.5 mm ²	Distribution block: Rigid / flexible 0,5 - 1,5 / 0,5 - 1,5 mm ²
	Water hose connection: DN 6/8			

Mechanical drawing



Interface diagram



Article No.

70142001K Krypton® DIS 24 V DC
 (Assembly: Argon® Stabiflow; measuring board for free chlorine, chlorine dioxide, ozone or hydrogen peroxide, Neon® DIS – configurable, Zirkon® Temperature FTG and Zirkon® DIS), 24 V DC



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