# Krypton® DIS Total

Disinfectant measurement

## Single channel water monitoring system

The Krypton® DIS Total is our specialized system for reliable measurement of total chlorine (free and combined chlorine) and water temperature. The single-channel monitoring system consists of a measureing device, a sensor, flow fittings, software, and cables. In the standard version, the Krypton® DIS Total is equipped with a total chlorine and temperature measurement. In addition, there is a digital input and an alarm relay. Our patented, modular Argon Stabiflow® flow fitting is integrated and ensures 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. The Krypton® DIS Total can also be extended with additional analog outputs, concentration, or volume-based control functions, 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. 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

| | |
|---|---|
| Total Chlorine | Up to 1000 µg/l, up to 5.00 mg/l / 10.00 mg/l / 20.00 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®: ~30l/h (7.9 gph) | |
| | Temperature: | 0..50 °C |
| | Pressure: | < 6 at 20 °C (87psi at 68 °F) |

### Output characteristics

| | | |
|---|---|---|
| Alarm relay | 1 potential-free N/O contact, max. 250 V, 6 A, 550 VA (invertible) | |
| Output signal | Option: 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, +6/-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) |
| | Operation: | 0 .. +50 °C (32 °.. 122 °F) |
| pH range | pH 6.. 10 | |
| 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 |

### Proportional 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 |
| Relay 1 | Potential-free N/O contact, max. 250 V, 6 A, 550 VA (pulse-pause, pulse-frequency) | |
| Relay 2 | Activating circulation pump | |

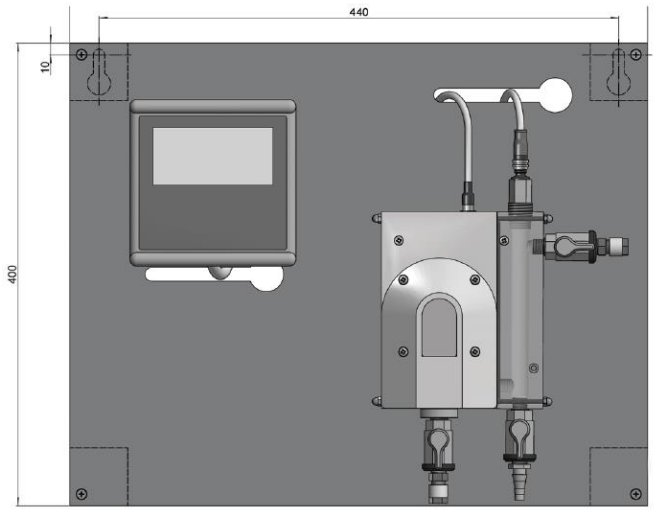
### Certificates and approval

| | |
|---|---|
| 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 |

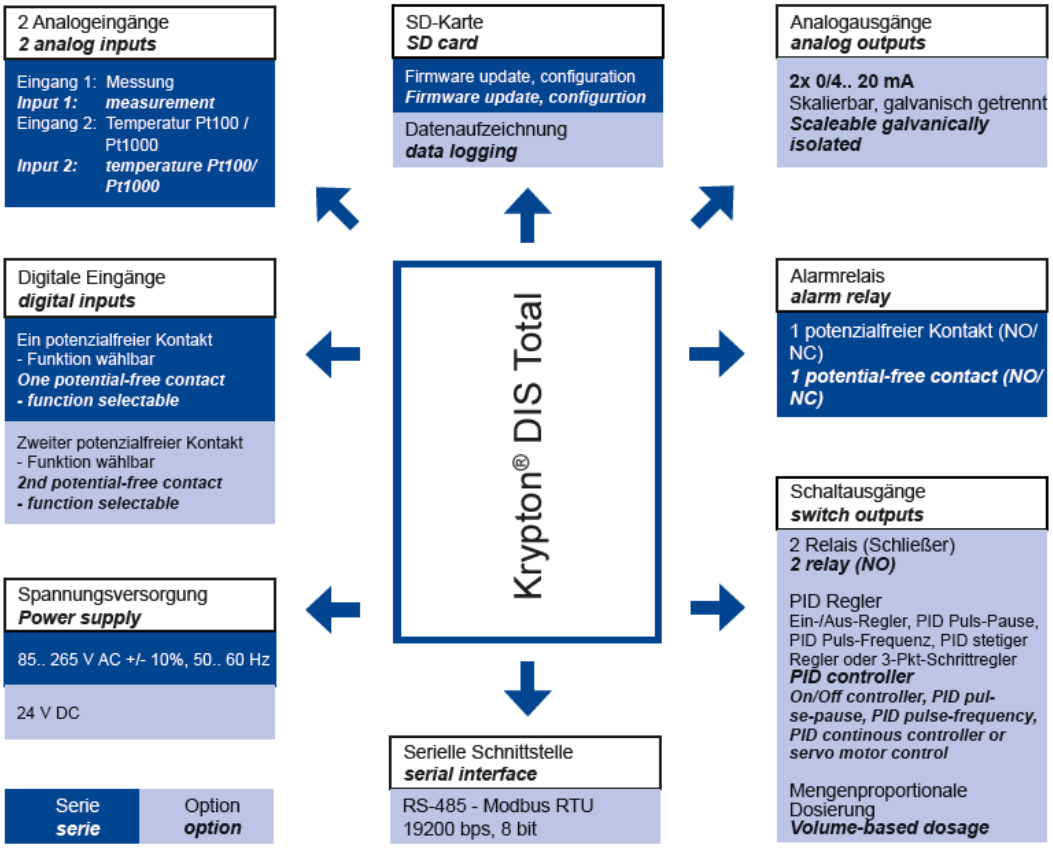
### Design configuration

| | | |
|---|---|---|
| Material | Board: | PVC |
| | Assembly: | PVC |
| | Instrument: | ABS |
| | Sensor: | Glass, POM / Platin / InnoDisk® |
| Dimensions | 400 x 500 mm | |
| Connection | Cable inlet: | 1 x M16, 2 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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