

Neon® DIS

Disinfectant measurement

Single channel water monitoring instrument

Neon® is a leading edge measuring and control instrument. Its range of functions can be tailored according to customers' applications.

The entry level version contains inputs for measurements and temperature, one digital input and an alarm relay. Various add-ons are available to expand the functionality as well as wall mounted or panel mounted housing. Neon's® water measurement process can be controlled at any time, from any place, on any device via Kuntze's Cloud Connect® service. All Kuntze products are Made in Germany.



Applications



Disinfection



Industrial Water



Pool & Spa



Drinking Water



Process Water



Cooling Water



Food/
Beverages



Waste Water
Treatment

Neon® DIS

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

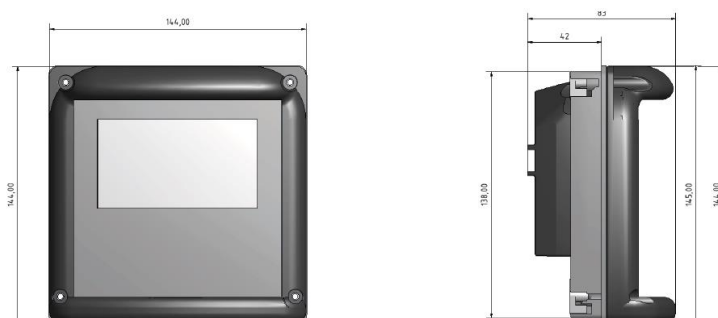
CE-Symbol	The product meets the requirements of the harmonized European standards and complies with the legal requirements of the EC directives
EMC	EN 61000 6-1 (3) EN 61000 6-2 (4) EN 61326

Design configuration

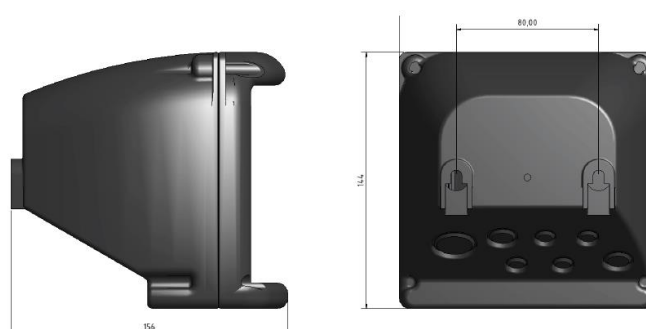
Material	Board: Assembly: Instrument: Sensor:	PVC PVC ABS Glass, Plastic / Gold / Platin / Hastelloy
Dimensions	400 x 500 mm	
Connection	Cable inlet: Plug-in terminal: Relays / power supply: Distribution block: Water hose connection:	1 x M16, 2 x M12 Rigid / flexible 0.14 - 1.5 mm ² Rigid / flexible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

Mechanical drawing

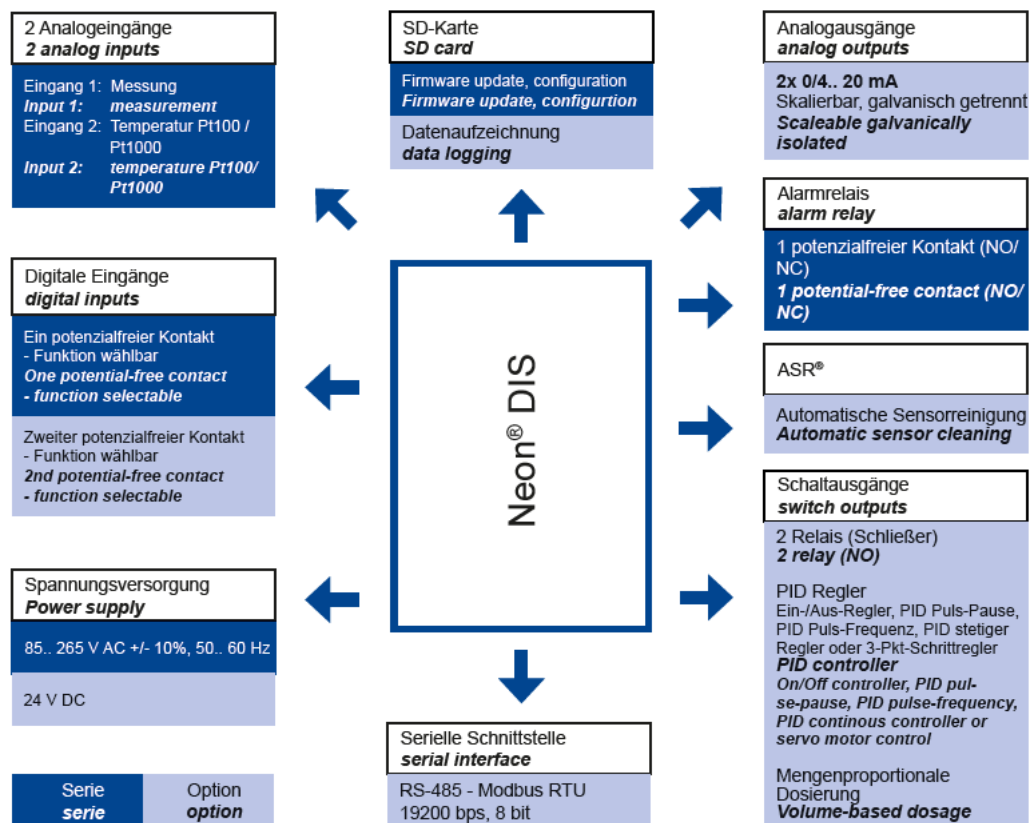
Neon® panel mounted



Neon® wall mounted



Interface diagram



Article No.

142201K

Neon® DIS 24 V DC



Kuntze Instruments GmbH
 Robert-Bosch-Str. 7a
 40688 Meerbusch
 Germany

+49 2150 70660
 info@kuntze.com
 www.kuntze.com