

Neon® pR

pH/ ORP measurement

- Easy handling by graphical menu
- Fitting for your application by modular setup
- Simple firmware update and configuration using SD-card



Neon® Touch wall mounted housing

Applications



Process Water



Drinking Water / Beverages



Waste Water Treatment

Description

The Neon® is a leading edge measurement and control instrument and its range of functions can be tailored according to your application. The entry level version contains input / outputs for measurement and temperature, key operation, a digital input, a alarm relay. The Neon is expandable through software upgrades and add on modules. It is possible to add up to two additional analogue outputs, control functions either concentration-based or volume-based, modbus interface and Datalogger. The information displayed on the screen can be selected by the user. With multiple installations the same settings within the software can be duplicated in additional instruments using industry standard SD cards. The new Neon® 'Touch' is simplicity in a small package, it has an up to date touch screen to navigate through the Neon® menus easily and intuitively. The Neon® PR can be used for the measurement of pH and ORP.

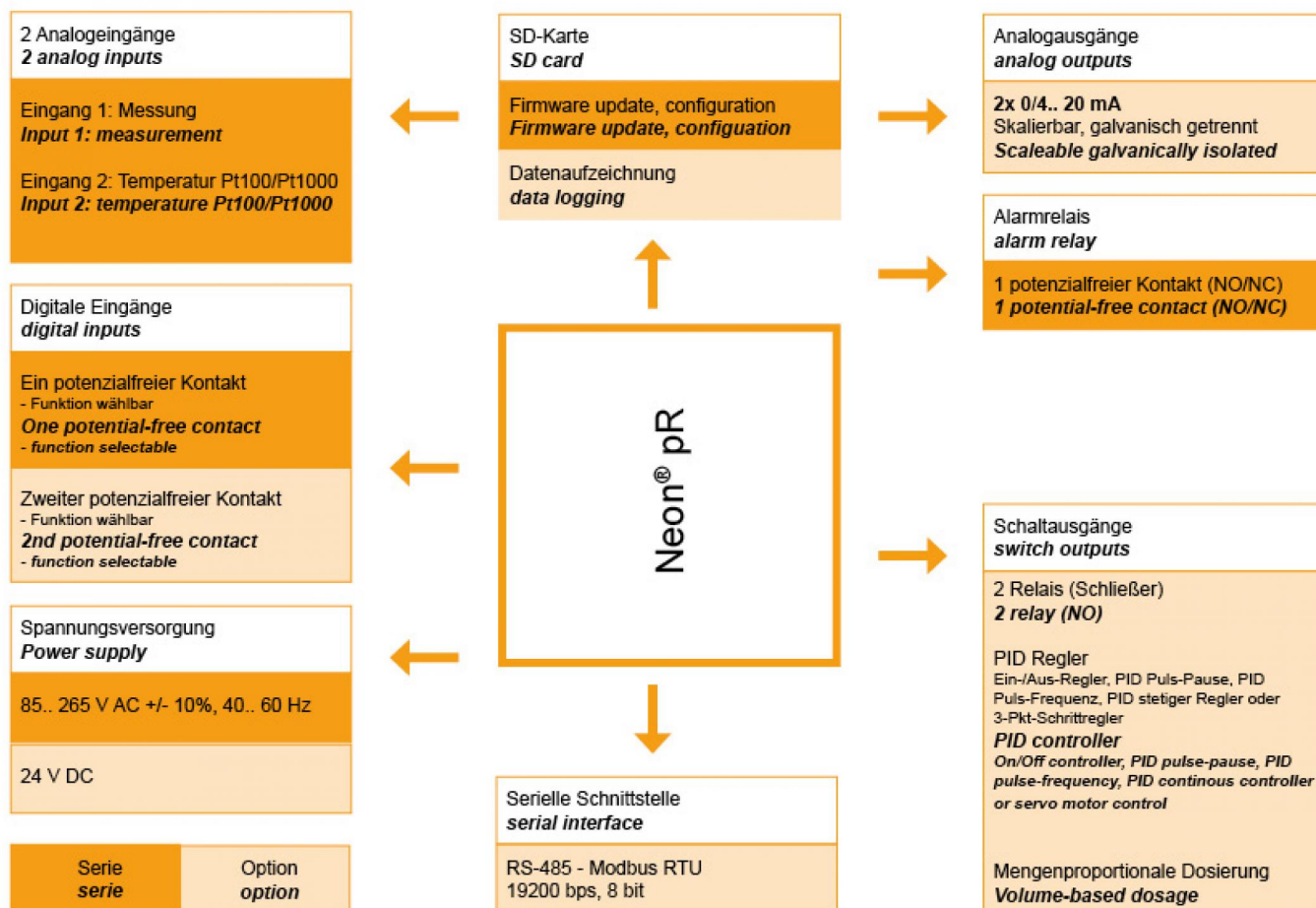
Particular characteristics

- 85 .. 265 V AC power supply
- 90x50 mm display - optional Touch
- Real time clock
- Automatic or manual temperature compensation
- Guided two point calibration
- Logging of the last 10 calibration data
- 2 limit values with delay, assigned to the alarm relay
- Alerts selectable for alarm relay
- Safety by autolock function
- Eventlog and event help
- Test menu for wiring check
- SD card function: firmware update, configuration and diagnosis file
- Power saving adjustable
- 2 user levels by password function
- Intuitive and easy menu
- Functional upgrade by activation code or with modules
- Option: 24 V DC
- Option: RS 485 - modbus RTU
- Option: 2 mA outputs 0/4 to 20 mA adjustable with fault current
- Option: 2 PID controller with 2 control relays
- Option: volume-based dosage with 2 control relays
- Option: 2nd digital input
- Option: data log function

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Interface diagram



Technical data

Measuring parameter

pH-value -2.00.. +16.00 pH
 ORP -1500.. +1500 mV

Input characteristics

Temperature measuring range -30.0 .. +140.0 °C
 Temperature coefficient Non-linear
 Digital input 1 as controller stop by external contact option: 2nd as controller stop or flow measurement for volume based dosing

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Output characteristics

| | |
|------------------|---|
| Alarm relay | 1 potential-free NO contact, max. 250 V, 6 A, 550 VA (invertable) |
| Output signal | Option: 2 x 0/4 .. 20 mA (scaleable, galvanically isolated) |
| | Load 500 Ohm |
| | Registration range Scaleable within the measuring range |
| Voltage output | +/- 6 VDC for impedance converter |
| Storage media | Accessory: SD card up to 2 MB - Industry standard |
| Serial interface | Option: RS 485 - modbus RTU |
| | Baud rate 19200 bps |
| | Data format 8 bit |

Power supply

| | |
|-------------------|--|
| Line voltage | 85.. 250 V AC, +/-10%, 40.. 60Hz option: 24 V DC |
| Power consumption | 10 VA |

Ambient conditions

| | |
|------------------|--|
| Temperature | Storage -20.. +65°C |
| | Operation -5.. +50°C |
| Humidity | max. 90% rH at 40°C (non-condensing) |
| Protection class | Wall mounted IP 65 |
| | Panel mounted IP 54 (front), IP 30 (housing) |

Controller

| | |
|------------------|--|
| Control response | Option: on/off controller (adjustable hysteresis) P/PI/ PID controller (pulse-pause, pulse-frequency or continuous output) servo motor control |
| Relay | 2 relays, each with a potential-free NO contact, max. 250V, 6 A, 550 VA |
| Start delay | 0.. 200 sec until controller active |
| Controller stop | Digital input |

Proportion to volume

| | |
|------------------|---|
| Control mode | Option: volume based by flow measurement |
| Flow measurement | Impulse measurement NPN (by digital input 2) |
| Flow measurement | Engine speed 0.030.. 9.999 l/Imp |
| Relay 1 | Potential-free NO contact, max. 250V, 6 A, 550 VA output of control variable as pulse frequency or pulse pause. |
| Relay 2 | Activating circulation pump |

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. |
| EMV/EMC | EN 61000 6-1 (3) EN 61000 6-2 (4) EN 61326-1 |

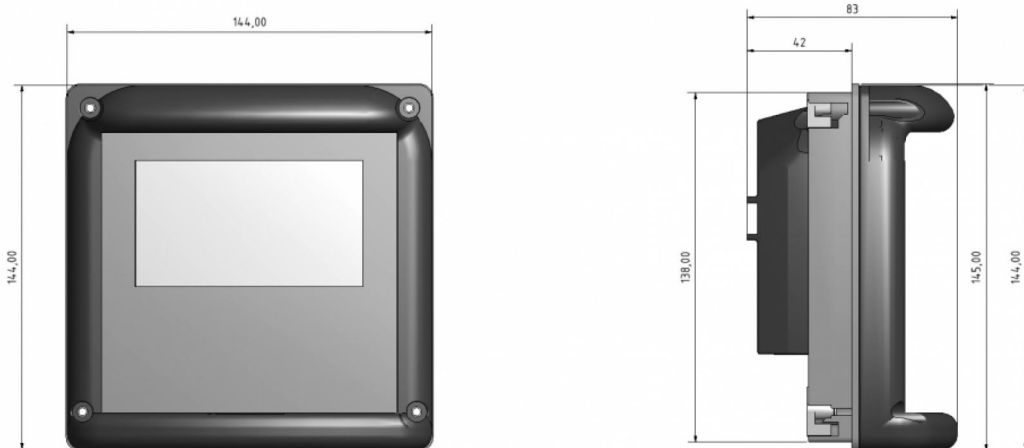
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Design configuration

| | |
|--------------------|--|
| Material | ABS |
| Dimensions | Panel mounted housing: 138x138x83 mm; Wall mounted housing: 144x144x156 mm |
| Mounting dimension | Panel mounted housing: 138x138x42 mm |
| Weight | 0.6 kg (wall mounted housing: 1 kg) |
| Connection | Cable inlet: 2x M16, 2x M12 + optional: 2x M12 and 1x M25 plug-in terminal: rigid /flexible 0.2-2.5 mm / 0.2-2.5 mm measurement rigid /flexible 0.2-1 mm / 0.2-1.5 mm |

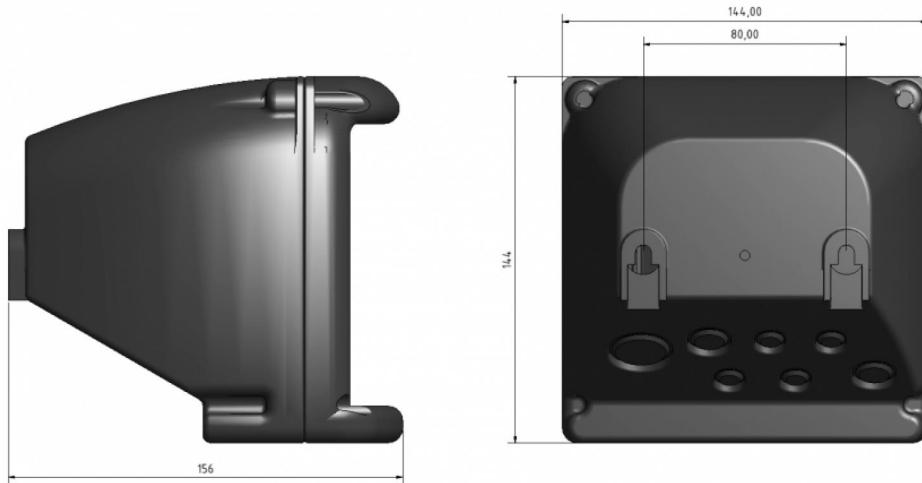
Mechanical drawing



Neon® panel mounted

Neon® pR

pH/ ORP measurement



Neon® wall mounted

Neon® pR

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Order information

| | | |
|---|-----|--|
| Grundtyp <i>type</i> | | |
| | 140 | Neon® Tasten (1 digitaler Eingang und Alarmrelais) Neon® Keys (1 digital input and alarm relay) |
| | 142 | Neon® Touch (1 digitaler Eingang und Alarmrelais) Neon® Touch (1 digital input and alarm relay) |
| Messparameter <i>measuring parameter</i> | | |
| | 000 | pH oder Redox pH or ORP |
| Spannungsversorgung / <i>power supply</i> | | |
| | 0 | 85 ..230 VAC |
| | 6 | 24 VDC |
| Schnittstellen / <i>interfaces</i> | | |
| | 0 | keine none |
| | 2 | Modbus RTU |
| Regelung / <i>controller</i> | | |
| | 0 | keine none |
| | 1 | PID mit 2 Regelrelais PID with 2 control relays |
| | 2 | Mengenproportionale Dosierung mit 2 Regelrelais volume based dosing with 2 relays |
| Eingänge <i>inputs</i> | | |
| | 0 | Erster digitaler Eingang (Basis) / first digital input (basic) |
| | 1 | Zweiter digitaler Eingang / second digital input |
| Ausgänge / <i>outputs</i> | | |
| | 0 | keine none |
| | 1 | Erster mA Ausgang first mA output |
| | 2 | Zweiter mA Ausgang second mA output |
| Sonderfunktionen <i>special function</i> | | |
| | 0 | keine none |
| | 2 | Datenaufzeichnung datalogging |
| Reinigung <i>cleaning</i> | | |
| | 0 | keine none |
| | 2 | DES Reinigung DES cleaning |
| Gehäuse <i>housing</i> | | |
| | S | Schalttafeleinbau (Front IP 54) panel mounted (front IP 54) |
| | W | Wandaufbau wall mounted (IP 65) |
| Sprache <i>language</i> | | |
| | DE | Deutsch german |
| | EN | Englisch english |

Choose the components you need and that's how your "assembly version" is designed. We will have to technically inspect and approve a free combination of individual key features.

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Accessories **hand-held units**



Radon Des- pH

The Radon photometer is used for measuring of Chlorine, Chlorine dioxide, Ozone, Hydrogen peroxide and pH. Accurate and consistent results are obtained quickly. Delivery contents is everything needed to measure Chlorine, Chlorine dioxide and Ozone. The delivery content contains everything needed for measuring Chlorine, Chlorine dioxide and Ozone. For measurement of Hydrogen peroxide you need a H₂O₂-addition and for the pH measurement the reagent phenolred.