

Neon® LF

Conductivity measurement

- Display of TDS possible
- 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 and 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® LF can be used for the measurement of conductivity.



Neon® LF

Conductivity measurement

Particular characteristics

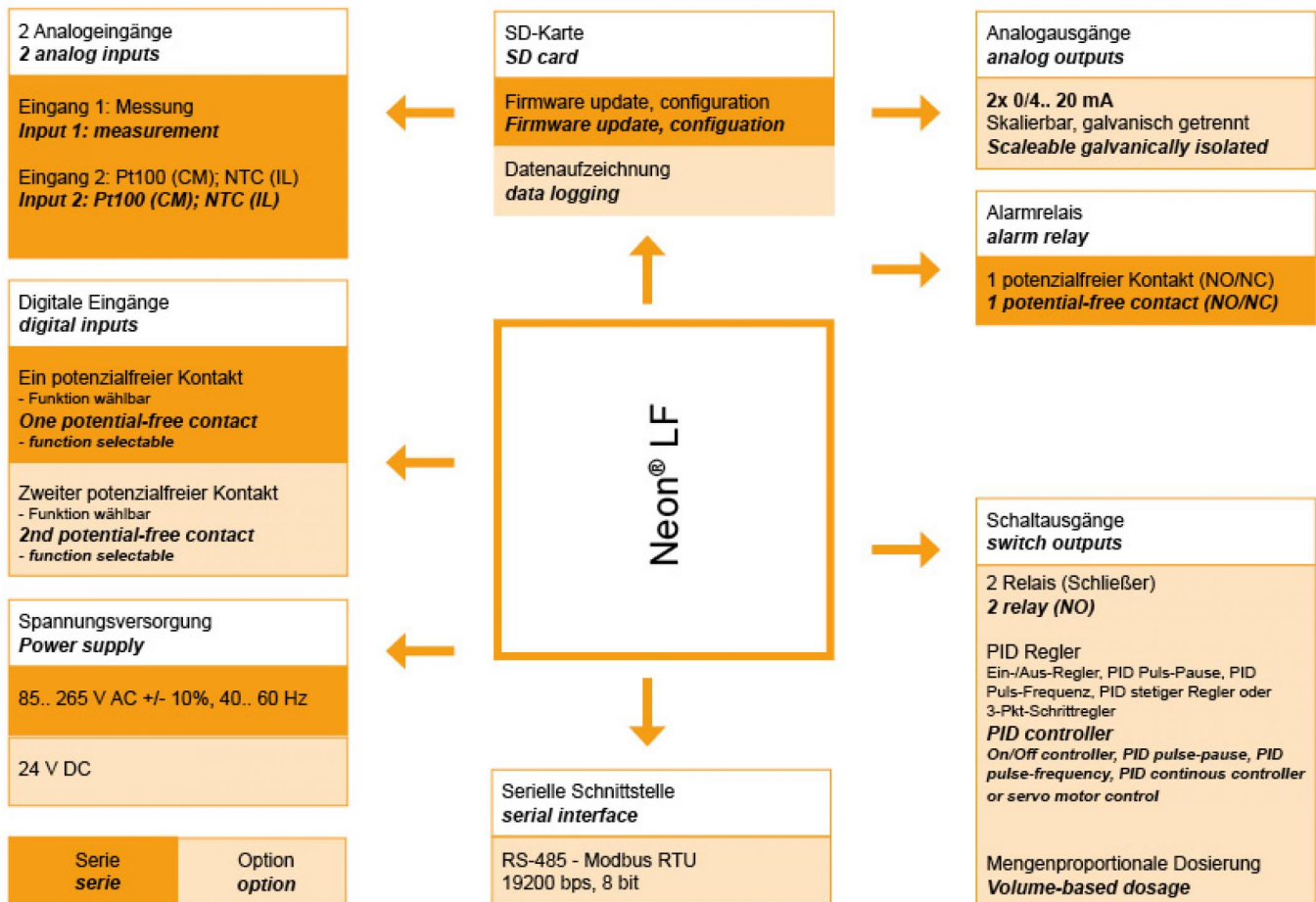
- 85 .. 265 V AC power supply
- 90x50 mm Display - optional Touch
- Real time clock
- Automatic or manual temperature compensation
- 2 limit values with delay, assigned to the alarm relay
- Alerts selectable for alarm relay
- Safety by autolock function
- Eventlog and event help
- Test menu for wiring check
- SD card function: firmware update, configuration and diagnosis file
- Power saving adjustable
- 2 user levels by password function
- Graphical 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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Conductivity measurement

Interface diagram



Technical data

Measuring parameter

Conductivity (inductive)	0.. 2.000 mS/cm
	0.. 20.00 mS/cm
	0.. 200.0 mS/cm
	0.. 2000 mS/cm
Conductivity (conductive)	0.. 2.000 µS/cm C=0,05 /cm
	0.. 20.00 µS/cm C=0,05 /cm
	0.. 200.0 µS/cm C=0,05 /cm
	0.. 2.000 mS/cm C=0,20 /cm
	0.. 20.00 mS/cm C=1,00 /cm
	0.. 200.0 mS/cm C=10 /cm



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Input characteristics

Temperature measuring range	-30.0 .. +140.0 °C
Temperature coefficient	0.0 .. 8.0 %/K adjustable or non-linear
Digital input	1 as controller stop by external contact; option: 2nd as controller stop or flow measurement for volume based dosing

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
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, +6/-10%, 40.. 60Hz option: 24 V DC
Power consumption	10 VA

Ambient conditions

Temperature	Storage -20.. +65°C
	Operation 0 .. +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: quantity 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. 250V, 6 A, 550 VA output of control variable as pulse frequency or pulse pause.
Relay 2	Activating circulation pump



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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

Design configuration

Material

ABS

Dimensions

Panel mounted housing: 138x138x83 mm; Wall mounted housing: 144x144x156 mm

Mounting dimension

Panel mounted housing: 138x138x42 mm

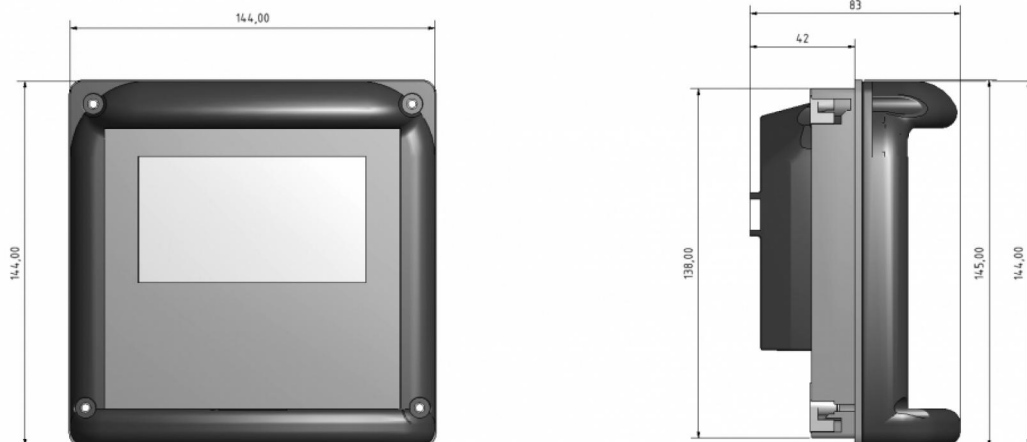
Weight

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

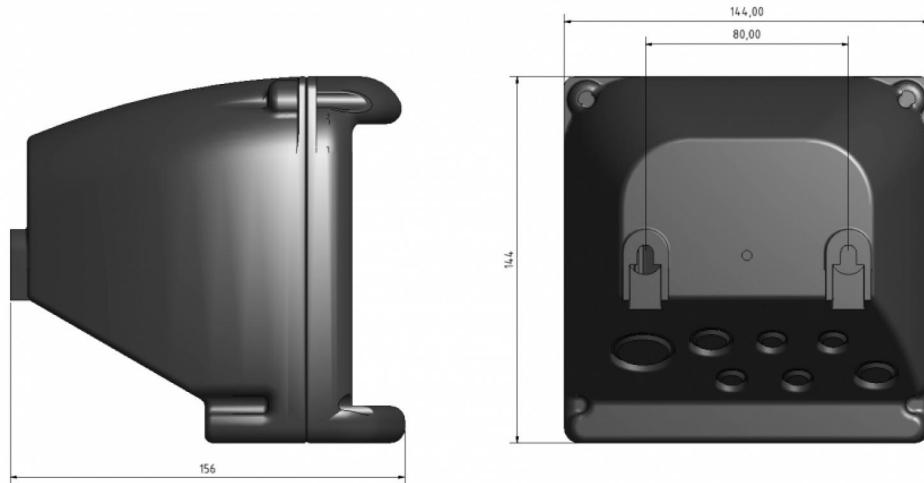


Panel mounted housing



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Conductivity measurement



Wall mounted housing



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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>		
	100	Konduktive Leitfähigkeit conductive conductivity
	190	Induktive Leitfähigkeit inductive conductivity
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 **accessories**

Industrial SD card 1MB Industry standard SD card

