

SIGNUX CLA01

Water quality — RS485



SX-CLA01



DESCRIPTION

Integrated residual chlorine transmitter for treated water, with a three-electrode cell and RS485 Modbus RTU output. Three ranges up to 20 mg/L, with standard or gold electrode.

The SX-CLA01 measures residual chlorine concentration in water. Cell and electronics share one body: the integrated design outputs the RS485 signal directly, which is the reason it is free of signal interference.

It is a non-membrane, constant-voltage type with a three-electrode system. There is no membrane and no reagent to replace: the three-electrode system gives high measurement accuracy, long working life and no need for frequent calibration. It resolves 0.01 mg/L, to within $\pm 5\%$ of full scale, with ± 0.05 mg/L of repeatability, and responds in under 30 seconds.

Measuring ranges are fixed when ordering — 0 to 2, 0 to 10 or 0 to 20 mg/L — with a standard or a gold electrode. The electrode has a service life of about one year depending on the water and usage conditions. Keep the platinum wire clean and bright, because dirt and mineral deposits on it reduce sensitivity and may stop it measuring properly.

FEATURES

- Three electrodes: They let it measure down to 0.01 mg/L and settle in under 30 seconds.
- Three ranges: 2, 10 or 20 mg/L, each with a standard or a gold electrode. Chosen when ordering.
- Installation: NPT 3/4 in at both ends, IP68, 6 bar, and the same four wires.

AT A GLANCE

Measures	Chlorine residual concentration
Output	RS485
Protection	IP68
Operating	0 to +50 °C

GENERAL

Measured parameters	Chlorine residual concentration
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Output	RS485	Modbus RTU
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Device Installation	NPT 3/4 in	At both ends
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Measuring principle	Three-electrode
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CHLORINE RESIDUAL CONCENTRATION

Range	0 to 2 mg/L	Chosen when ordering
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Range	0 to 10 mg/L
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Range	0 to 20 mg/L
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Resolution	.01 mg/L
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Accuracy	±5 % FS
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Repeatability	±0.05 mg/L
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Response time	< 30 s
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OPERATING CONDITIONS

Water temperature	0 to +50 °C
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Water pH	4 to 9 pH	Outside this range the reading is not valid
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Flow rate	30 to 60 L/h	The water must be moving past the cell
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OUTPUT AND POWER

Output interface	RS485	Modbus RTU, baud rate configurable from 1200 to 115200 baud
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Default communication	4800 baud · address 1	8 data bits, no parity, 1 stop bit
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Power supply	7-30 V DC
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Power consumption	0.19 W
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Configuration	Over RS485	Address and baud rate
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CONSTRUCTION

Protection rating	IP68
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Maximum pressure	.6 MPa
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Cable length	5 m	Other lengths on request
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Electrode life	1 year	A consumable: it is replaced as it ages
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Overall length	266 mm	Body 212 mm
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Diameter	30 mm
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PART NUMBERS

PART NUMBER	MEASUREMENT RANGE	ELECTRODE TYPE
SX-CLA01-2	0-2 mg/L	Standard
SX-CLA01-2A	0-2 mg/L	Gold
SX-CLA01-10	0-10 mg/L	Standard
SX-CLA01-10A	0-10 mg/L	Gold
SX-CLA01-20	0-20 mg/L	Standard
SX-CLA01-20A	0-20 mg/L	Gold