

LSW ONLINE HARDNESS ANALYZER

The LSW-JP-TH Online Hardness Analyzer uses the principle of titrimetric. colorimetry and is the best choice for water softening systems and reverse osmosis protection for enrey-level measurement.



APPLICATION

- Demineralized water
- Reverse osmosis
- Boiler water
- Laundry room
- Groundwater
- Cooling tower
- Pharmaceutical water
- Process water
- Drinks / food

Fully automatic measurement

According to the selected reagent, automatically measure the total water hardness in different ranges. This analysis is more efficient than manual measurements and more reliable than other indirect measurement methods such as ion-selective electrodes.

Smart & accurate

GB measurement method - Titration colorimetry method, the instrument has a calibration function. Integrated measurement techniques and two-stage analysis identify external influences such as trough contamination, watery turbidity and external light and eliminate these effects in the measurement.

Automatic cleaning

Rinsing and Cleaning are performed automatically for each analysis, ensuring measurement accuracy, repeatability and reduced field maintenance.

Minimum maintenance workload

Complete isolation of water and testing device, detachable measuring cell, without the need for additional tools for maintenance, can be easily implemented. It is recommended to replace the spare parts package once a year (including: peristaltic pump head reagent tube, stirrer, seal)



LCD backlight LCD display

Multi-language graphics backlight LCD display measurements, reagent remaining, alarm values and relay status.

A variety of measurement modes

- Continuous measurement
- Interval measurement (5-99min)
- External switch signal initiates measurement

Low reagent consumption

Reagent bottle can be easily replaced, 500ml reagent can measure 5000 ~ 10000 times. Reagents valid for 2 years.

0 / 4-20mA output

SD card data storage

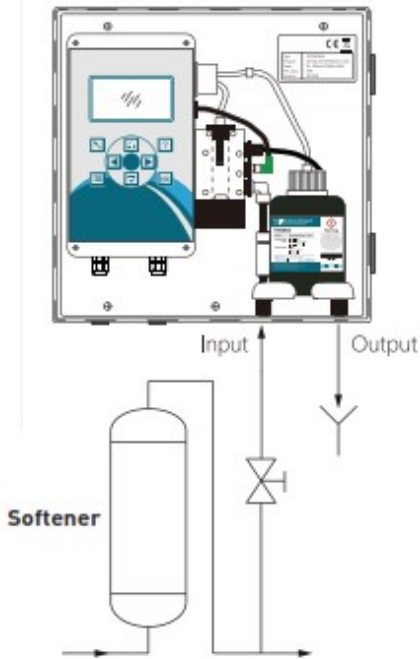
2G data storage card, can be directly imported into the computer to excel format access to historical data and system failure information.

Basic Parameters

Principle	Titration Colorimetry
Ambient temperature	5 - 45 °C
Water temperature	5 - 40 °C
Water pressure	0.5 - 5bar, recommended 1-2bar over 2bar recommended installation of pressure reducing valve
In / out connection	OD 6mm hose
Water quality	colorless, no suspended matter, no bubble pH 4 - 10.5, iron : <3ppm, copper : <0.2ppm, aluminum : <0.1ppm, manganese : <0.2ppm
Humidity	20 - 90% RH
Power supply	85 - 265VAC, 47-63Hz, 25VA (runtime)
Size / Weight	300 x 300 x 200mm, ca. 4Kg (with outer case)
Protection class	IP65

Technical Data

Model	LSW-JP-TH
Measuring range	0.53 - 534.0 ppm CaCO ₃ (see reagent type)
Measurement time	About 3 minutes, depending on water hardness and set rinse time
Accuracy	± 5% of the upper limit of the selected reagent
Repeatability	± 5% of the upper limit of the selected reagent
Analysis cycle	continuous measurement / interval measurement (5-99min) / external start signal ± 5% of the upper limit of the selected reagent
Rinse time	15 - 1800s
Water consumption	about 1000ml / analysis
Display	Backlit LCD display graphics, numerical
Units	mmol / L, ppm CaCO ₃ , ° dH, ° f and so on
Analog output	0/4 - 20mA, Max. 750Ω
Relay output	2 passive relay output NC / NO, 250VAC 4A
Input	External switch signal start analysis



Model	Description
LSW-JP-TH	LSW-JP-TH Online Hardness Analyzer (With OuterBox)
LSW-JP-TH-SKIT	Spare parts kits, including: peristaltic pump head (including pump tube), sealing ring, stirrer, reagent bottle connecting pipe, it is recommended to change one year
LSW-JP-TH-LED	LED light source, it is recommended to change for two years

LSW HARDNESS REAGENT LSW-JP-5001~LSW-JP-5100



The hardness reagents are only suitable for use with the LSW-JP-TH instruments, which measure different water hardness ranges by selecting different types of reagents.

Reagents valid for 2 years.

Each bottle 500ml, can measure 5000 ~ 10000 times.

Reagent type and measuring range:

Reagent type	°dH	°f	ppm CaCO ₃	mmol/L
LSW-JP-5001	0.03 - 0.3	0.053 - 0.534	0.53 - 5.34	0.005 - 0.053
LSW-JP-5003	0.09 - 0.9	0.160 - 1.602	1.60 - 16.0	0.016 - 0.160
LSW-JP-5010	0.3 - 3.0	0.534 - 5.340	5.34 - 53.4	0.053 - 0.534
LSW-JP-5030	0.9 - 9.0	1.602 - 16.02	16.0 - 160.2	0.160 - 1.602
LSW-JP-5050	1.5 - 15	2.670 - 26.70	26.7 - 267.0	0.267 - 2.670
LSW-JP-5100	3.0 - 30	5.340 - 53.40	53.4 - 534.0	0.534 - 5.340

Typical Application

